Initial Study-Mitigated Negative Declaration for the proposed Pine Mountain Lake Fuel Reduction Project Tuolumne County, California State Clearinghouse Number 2024010405

prepared by:
Justin Walker
Will Dorrell, Registered Professional Forester, RPF #2311
California Reforestation
22230a Colorado River Drive South Sonora, CA 95370
On Behalf of The Tuolumne County Resource Conservation District

For

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

CAL FIRE
P.O. Box 944246
Sacramento, CA 94244-2460
(916) 263-3370

October 17, 2023Contents

MITIGATED NEGATIVE DECLARATION

Introduction and Regulatory Context

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 January 17, 2024 and is being circulated for a 30-day state agency and public review period. The review period ends on February 16, 2024.

☐ **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.

INTRODUCTION

This initial study-mitigated negative declaration (IS-MND) describes the environmental impact analysis conducted for the proposed project. This document was prepared by California Reforestation, for the Tuolumne County Resource Conservation District (TCRCD) 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.

REGULATORY GUIDANCE

This IS-MND has been prepared by California Reforestation, for the Tuolumne County Resource Conservation District (TCRCD), and 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 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.

PURPOSE OF THE INITIAL STUDY

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 January 17, 2024 and ends on February 16, 2024.

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

TCRCD has elected to utilize the first and second options of the notification options. The NOI was posted at two prominent locations on and off-site in the area where the project is located for the entire 30-day public review period. The two locations where the NOI was posted are:

1. First Location: At the entrance to the Motherlode Land Trust parking area, approximately 12000 Clinton Road, Groveland, CA 95321
2. Second Location: At the entrance of Pine Mountain Lake Association approximately, 19200 Ferretti Road, Groveland, CA 95321

The NOI was also published in the Union Democrat newspaper on January 20, 2024, providing access to the public during the 30-day public review period. 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
CAL FIRE
P.O. Box 944246
Sacramento, CA 94244-2460

Phone: (916) 653-7772
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.

Project Description and Environmental Setting

PROJECT LOCATION

The Pine Mountain Lake Fuel Reduction (PMLFR) project is located East of Groveland, CA adjacent to the community of Pine Mountain Lake in Tuolumne County. The project footprint is owned by multiple private landowners. The PMLFR project boundary is described as portions of sections 13, 23, 24, 25 & 26 T1S R16E Mount Diablo Baseline and Meridian (MDB&M).

BACKGROUND AND NEED FOR THE PROJECT

The Pine Mountain Lake Association (PMLA) is a large Wildland Urban Interface (WUI) subdivision in an extreme fire hazard zone in southern Tuolumne County. Since the major bark beetle infestation began in 2010, due to drought conditions and expanding climate change, the landscapes around Pine Mountain Lake have been dramatically impacted by conifer mortality. In some sections of the forest, it's not uncommon to witness over 50% mortality of the mature ponderosa pine component of the Sierra mixed conifer habitat type. Within the 3,360 acres that encompasses the Pine Mountain Lake Association, most of the dead, standing trees around houses and structures have been addressed through the hard work of the community. Their uninhabited green space has not been treated. This green space of PMLA, and adjacent properties to the east, need to have the dangerous dead fuels removed. These untreated lands to the east are relatively large parcels owned by landowners who have limited financial resources to adequately address the imposing wildfire threat that is currently present. The town of Groveland is juxtaposed to the west of PMLA and is an important gateway to Yosemite National Park. Both PMLA and Groveland are large economic centers within Tuolumne County. This project will dramatically decrease the wildfire threat to the 2,834 parcels within PMLA, and the approximately 1,250 other parcels within the Groveland Community Service District. This region of Tuolumne County has historically been impacted by large wildfires. This project's intent is to develop a defensible fuel break on the eastern flank of Pine Mountain Lake and Groveland. This project will develop a defensible fuel break of approximately 640 acres, using the anchors of Highway 120 to the south and the rim of the Tuolumne River to the north.

PROJECT OBJECTIVES

1. Build a sustainable, defensible fuel break.
2. Dramatically reduce potential of release of high levels of CO_2 from wildfire.
3. Establish a fire resilient and healthy forest.

PROJECT START DATE

The project is proposed to start Upon Approval.

PROJECT DESCRIPTION

This project will use a variety of methods to reduce fuel loading and remove ladder fuels on a highly dense, approximately 640-acre WUI area east of Pine Mountain Lake.

Phase I:
Manual or mechanical tree felling of dead/hazard trees with a felling crew with chain saw or tracked style feller buncher, to establish a safe work environment. Brush, ladder fuels, and suppressed trees will be targeted for removal with a goal of retaining diverse species, and stand structure. Ideal spacing in the treated landscape will be variable and dependent on vegetation density. Generally, 10–40-foot crown spacing. The primary treatment method for this will be mastication using tracked style excavators or skid-steer.

Phase II:
Hand crews utilizing chainsaws, and pole pruners will prune trees ½ the height of the crown or 8-10 feet, whichever is less. This treatment will target areas either too steep, rocky, or sensitive for mechanical treatment. Slash will either be broadcast chipped or lopped and scattered.

Phase III:
Slash treatment (if required) will be done with tracked or rubber-tired mastication. Areas where machinery is unable to access or is excluded from, slash disposal will be done by hand using lop and scatter.

Phase IV:
Herbivory will be used to browse the regenerating vegetation.

ENVIRONMENTAL SETTING OF THE PROJECT REGION

The project lays in the southwestern portion of Tuolumne County in the Sierra Nevada Mountain range. The project is directly adjacent to Pine Mountain Lake and various surrounding communities. The project footprint sprawls across portions of the Pine Mountain Lake, Hells Hollow creek and Grapevine creek watersheds. These are considered part of the upper Tuolumne River drainage and San Joaquin River basin. The project runs from Highway 120 in the south to just east of the Pine Mountain Lake Airport. The ownership consists of multiple private landowners with 2 larger main landowners being Pine Mountain Lake Association and the Motherlode Land Trust. The land is not actively managed as of present.

DESCRIPTION OF THE LOCAL ENVIRONMENT

The 640-acre project area is best described as a transition belt between montane-hardwood conifer to Sierra Nevada Mixed Conifer Forest consisting of sugar pine, ponderosa pine, incense cedar, white fir, black oak, valley oak, California foothill pine, and interior live oak, as well as other riparian species. The understory consists primarily of interior live oak, manzanita, conifer sapling, toyon, yerba santa, poison oak, and ceanothus. Slopes within the project vary from level topography to over 50%. Elevation ranges from 2,500 to 3,100 feet. The aspect is variable though it mostly lies on multiple ridgelines with a northwest aspect. Big Creek, Texas Gulch, and Long Gulch run through the project.

CURRENT LAND USE AND PREVIOUS IMPACTS

There are many historic land uses. The central Sierra Mi-Wuk were known to inhabit this region in prehistoric times. In historic times, the lands were utilized in various subsistence manners and for resource extraction, such as gold, and timber. The project resides on a portion of the 1500-acre Long Gulch Ranch owned by John Meyer and Lena Meyer Ferretti in the 1920's and was primarily range cattle land. Various mining ditches are located within the property. The historic main line of the Hetch Hetchy Railroad bisects the project. In 2014, the Mother Lode Land Trust (MLLT) purchased a portion of the Long Gulch Ranch, placing half of it into a preserve for the Great Gray Owl (GGO) and the other half was subdivided. Since then, it has either been used for cattle range or has sat unoccupied. Present land uses on the various parcels include wildlife habitat, recreation, and residential.

Multiple projects have been proposed within the footprint though few have come to fruition.
A Natural Resources Conservation Service (NRCS) funded fuel reduction project for Long Gulch Ranch was assessed in 2016 though never materialized and ultimately transformed into the present project.

Recorded known timber harvest activities include:

- Previous timber harvest activities were visible within the project area though no records were available during preparation of this document. These harvest activities likely occurred in the 1980's and possibly a previous harvest in the 1950's and or 1900's.
- 1996- Pine Mountain THP; 04-95-204-TUO-31, 130 acres of commercial thinning
- 1998- Double L THP; 04-99-020-TUO Shelter wood removal step in 2002 in the SE region of the PMLFR boundary.
- 2011- EQIP Program, Project #749104112ZN, Practice 666 (Timber Stand Improvement)
- 2012- Big-Long Fuel Reduction Project consists of shaded fuel breaks along two ridges in the Big Creek and Long Gulch areas near Groveland. The project is approximately 52 acres in size and links Big Creek Shaft Road off Highway 120 with Clinton Road off Ferretti Road.
- Other notable fuel reduction projects within the immediate vicinity were completed on Pine Mountain Lake Association property in 2021-22.

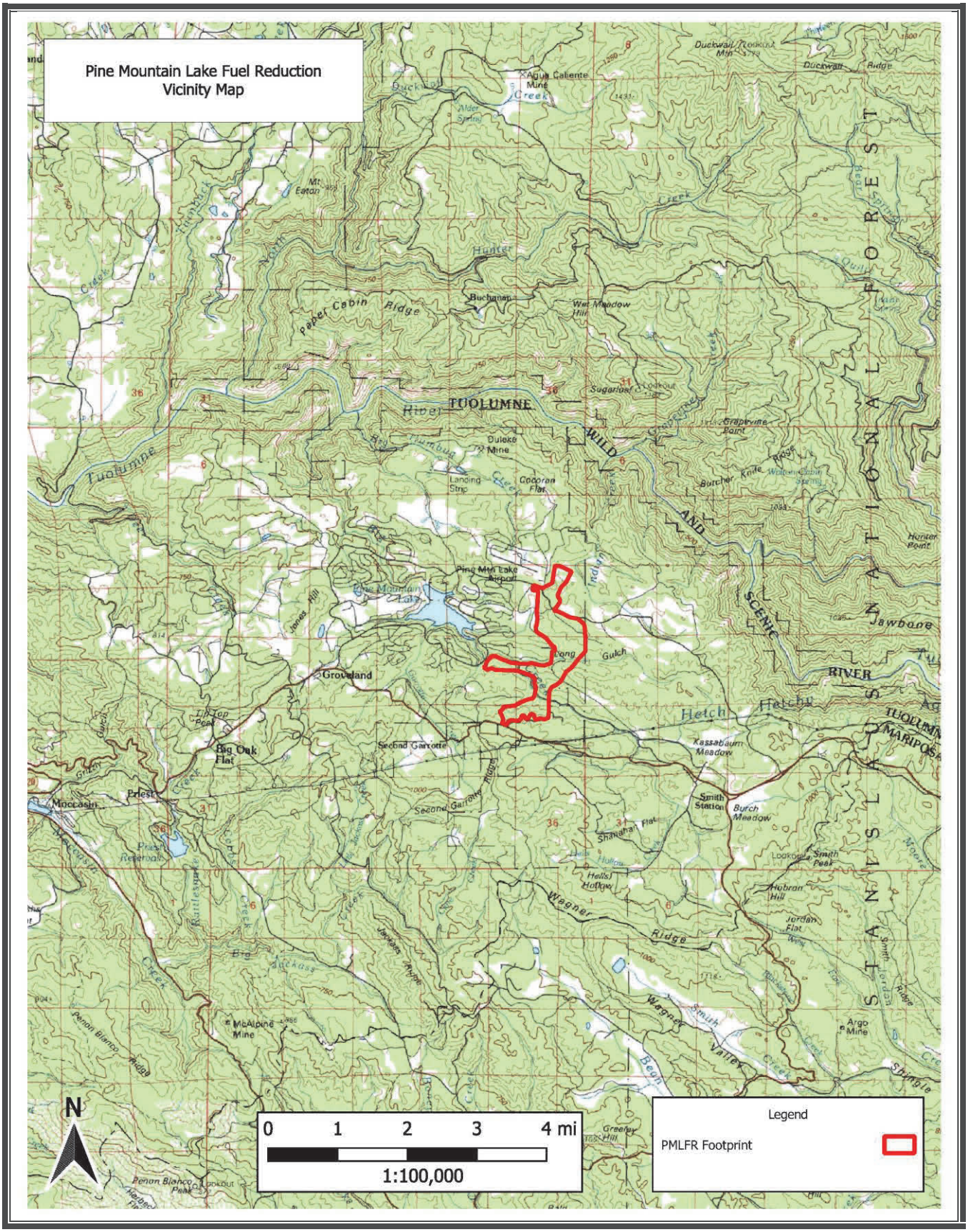


Figure 1. Project Location Map #1 of 1.

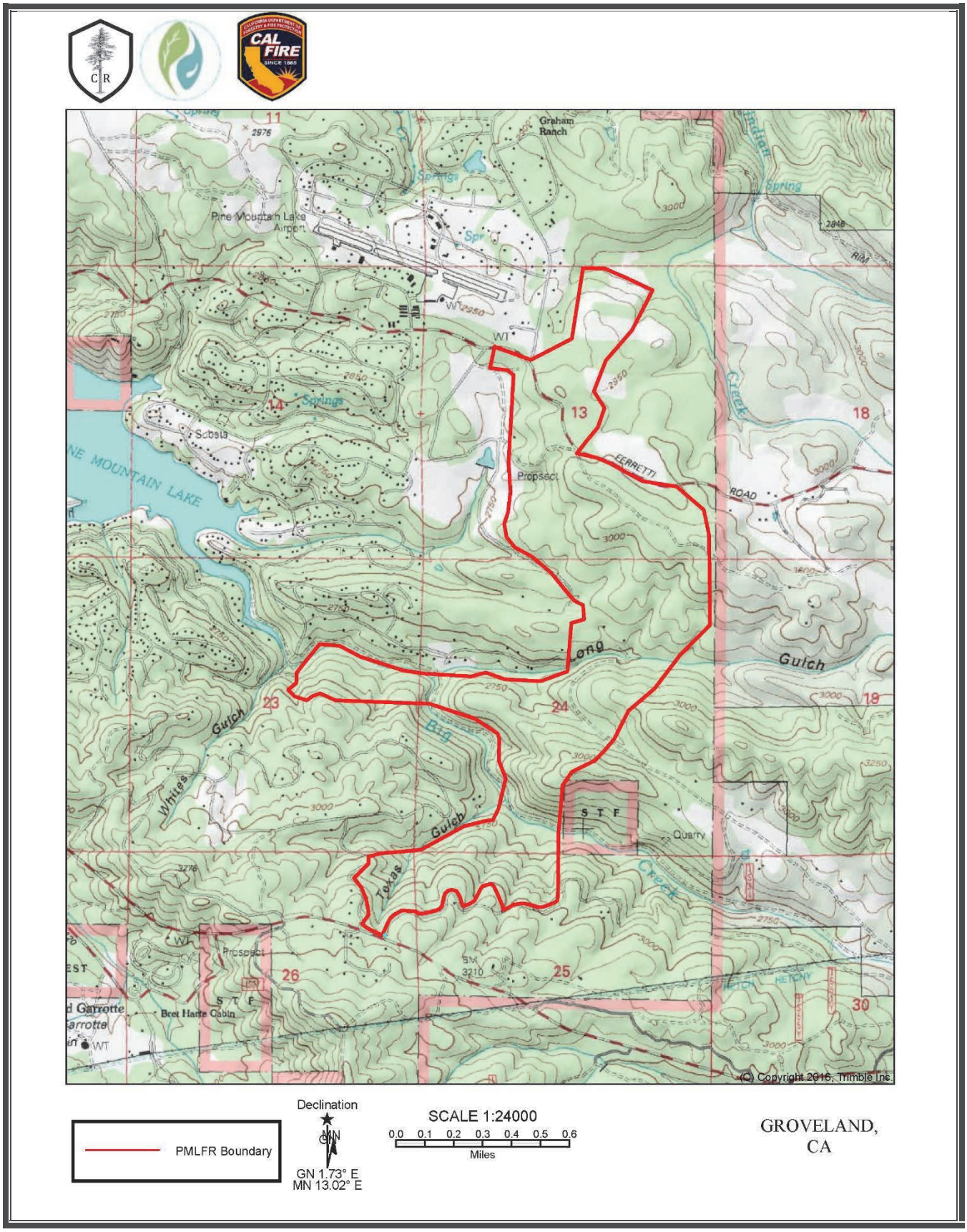


Figure 2. Project Location Map #1 of 2.

Conclusion of the Mitigated Negative Declaration

ENVIRONMENTAL PERMITS

The proposed project will not require any additional environmental permits.

MITIGATION MEASURES

The following mitigation measures will be implemented by the TCRCD to avoid or minimize environmental impacts. Implementation of these mitigation measures will reduce the environmental impacts of the proposed project to a less than significant level.

Mitigation Measure #1: FYLF- If species are found near or in the project area, a 300-foot no work zone will be established around all suitable habitat. A qualified RPF, supervised designee, or biologist familiar with species identification and life history shall survey for amphibians during the survey period, prior to operations, each year that operations may occur. In the case of a detection, the 300' no work zone will extend 300' from the high-water mark of the watercourse. These protection measures will be designated on the ground by the RPF or supervised designee using flagging; the color, meaning and location of the flagging will be communicated to create proper understanding with all operators on the project.

Mitigation Measure #2: Bald Eagle- For work being performed from February 1 to September 15 a nesting bird survey will be completed prior to the start of each year of operations. If an active nest is found, a 0.5 mile no disturbance buffer will be placed on the nest until the chicks have fledged. Unless the trees pose a hazard to the public or project workers the project will retain nesting habitat, large prominent snags (especially ponderosa pine).

Mitigation Measure #3: GGO- ¼ mile no-work buffer will be placed around any Great gray owl nest identified during any year of operations until chicks have fledged, with an additional 15-day monitoring period to ensure that final fledglings are not active on or near the ground. This will be monitored by a qualified RPF or RPF designee. Within the ¼ mile buffer from the nest, lower limbs will be left to provide residual habitat characteristics to facilitate fledgling habitat. Due to there being a confirmed active Great Gray Owl nest within the project in 2023, any potential Great Gray Owl nesting habitat within the project where the species could be impacted, shall be surveyed by a qualified RPF or RPF supervised designee, during the survey period and prior to operations, each year that operations may occur within the critical period. It is not possible to properly survey within ¼ mile of the project due to the restraints of private land ownership. Additionally, unless the trees pose a hazard to the public or project workers, the project will retain nesting habitat, large live or dead trees with defects or decaying wood and cavities.

Mitigation Measure #4: California Spotted Owl- Nesting habitat within the project where the species could be impacted shall be surveyed by a qualified RPF or RPF supervised designee, during the survey period, prior to operations, each year that operations may occur within the critical period. Surveys will occur within the project footprint prior to operation when operations occur during the nesting period (February 1 to September 15). If active nest(s) are found within or adjacent to the project footprint a ¼ mile no operations buffer will be placed on the nest tree until chicks have fledged. Suitable nest trees (i.e., large live or dead trees with defects, decaying wood, or cavities) will not be removed unless it poses a hazard to the public or

project workers. The project will retain nesting habitat (e.g., multistoried or complex structure, high canopy cover, large amounts of coarse woody debris).

Mitigation Measure #5: Crotch Bumble Bee- Surveys during floristic period. 25-foot EEZ will be flagged around active bumble bee nests. Surveyors will look for signs of ground nests pebbling of earth as well as in abandoned rodent burrows. A 10 foot no disturbance buffer will be placed surrounding the nest. Manual work with hand tools may be conducted between 10 and 25 feet from the nest. A minimum of 5 pollinator shrubs/trees per acre will be maintained where possible.

Mitigation Measure #6: Botanical Species of Concern- including but not limited to Smalls's southern clarkia, Mariposa clarkia, yellow-lip pansy monkeyflower, slender-stemmed monkey flower, Tuolumne fawn lily **-** Botanical surveys were completed during floristic period on the project by a qualified RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Mitigation Measure #7: Western Pond Turtle- Focused visual surveys were completed on the project by a qualified RPF or RPF supervised designee. No presence of species was identified at the time of survey, but it is expected that this species is extant. If populations or individuals are detected, a 50-foot no disturbance buffer will be placed around the WPT nest. If nest cannot be identified a 100 foot no disturbance will be placed along the active watercourse.

Mitigation Measure #8: Cultural Sites:

- Cultural sites may be assigned an Equipment Exclusion Zone (EEZ) or an Equipment Limitation Zone (ELZ), as determined in consultation with a Registered Professional Archaeologist to protect the integrity of the site.
  - EEZ will be placed 25-feet around the site perimeter.
  - ELZ will be used on specific linear features: historic ditches. The ELZ will be 25 feet though the machine may reach in and masticate material.
- No ground disturbing operation of any kind shall occur within the EEZ of a cultural site.
- All EEZ and ELZ's will be flagged in blue and red prior to operations.
- Trees/snags within striking distance may be directionally felled away from sites.
- Use of heavy equipment within EEZ boundaries may include, but is not limited to existing roads, tractor trails and/or landings.
- A CAL FIRE State Archaeologist may approve additional or alternative site-specific protections measures prior to project activities occurring.
- Meeting between Registered Professional Forester (RPF) or supervised designee familiar with on-site conditions and Contractor will be conducted prior to start of operations.
- Project planners shall utilize site records to plan and designate protection measure placement to ensure adherence to prescribed protection measures.
- Contractors preforming work shall be required to protect the recorded sites described herein and any cultural resources uncovered during the project operations.
- If any new cultural resources are found during implementation, project activities within 100 feet of the newly discovered cultural resource shall be immediately halted and notification given to landowner and RPF.
- The RPF shall initiate site review and notify and consult with CAL FIRE State Archaeologist for site specific protection measures. New sites will be required to be recorded and the ASR will be

amended and reviewed by the Consulting or CAL FIRE State Archaeologist.

- Site specific mitigation measures are detailed in the confidential Archaeological Survey Report (ASR).

Mitigation Measure #9: Cultural 2:

- If human remains are discovered, the Tuolumne County Coroner and a CAL FIRE State Associate Archaeologist must be contacted within 24 hours. Work may not resume until clearance is granted by the CAL FIRE State Archaeologist.
- The RPF shall initiate site review and notify and consult with the consulting Archaeologist for site specific protection measures and its recording notification will be provided to the appropriate Native American tribal groups and Archaeologist.
- If any cultural resources are found during implementation, project activities within 100 feet of the newly discovered cultural resource shall be immediately halted and notification given to landowner and RPF.
- No ground disturbing operations of any kind shall occur within cultural sites.
- Site specific mitigation measures are detailed in the confidential Archaeological Survey Report (ASR).

Mitigation Measure #10: Geology:

- No heavy equipment on excessively wet soil such as conditions that produce areas of ponded water, wheel rutting, spinning or churning of wheels or tracks.
- Slopes greater than 50% shall not be treated.
- Heavy equipment shall not work on slopes near watercourse within the equipment exclusion zones (EEZ) as defined in **Mitigation Measure #12.** EEZ's shall be flagged by RPF or supervised designee.

Mitigation Measure #11: Hazardous Material:

- Refueling shall be completed 100 feet from a watercourse.

Mitigation Measure #12: Hydrology:

- Watercourses shall be classified into one of the following categories or "classes":
  - **I. Class I**: Domestic Supplies, including springs, onsite and/ or within 100 feet downstream of the operations area and/ or Fish always or seasonally present onsite, including habitat to sustain fish migration and spawning.
  - **II. Class II:** Fish always or seasonally present offsite within 1000 feet down stream and/ or aquatic habitat form non-fish aquatic species.
  - **III. Class III:** 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
  - **IV. Class IV:** Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric, supply or other beneficial use
- Watercourses shall have the following protection measures by classification
  - **I. Class I:** 100-foot Equipment exclusion zone (EEZ) measured from the edge of the visible flood channel.
  - **II. Class II:** 50-foot EEZ measured from the edge of the visible flood channel.

III. **Class III:** 15- foot Equipment Limitation Zone measured from the centerline of the watercourse. Equipment may make crossings perpendicularly to the watercourse but may not track up and down within the ELZ. Crossings should be limited to as little as possible.
IV. **Class IV:** 15-Foot EEZ on the uphill side of the watercourse measured from the top of the cut bank and a ELZ on the downhill side of the watercourse starting at the tow of the fill slope. Operators my "reach-in" and masticate vegetation on the downhill fill slope as long as soil disturbance is limited.

- Watercourse Designation:

I. **Class I:** Shall be flagged in solid blue flagging at the edge of the EEZ
II. **Class II:** Shall be flagging in solid blue flagging at the edge of the EEZ
III. **Class III** shall be centerline flagged in blue and white candy-striped flagging.
IV. **Class IV** shall be flagged at the edge of the EEZ on the uphill side in solid blue flagging, the downhill side/ toe of the slope will not be flagged.

Equipment Exclusion Zones (EEZ): Prohibit equipment from entering into except where there is an established road, crossing, or skid trail. No vegetation shall be treated by heavy equipment while in the EEZ.
Equipment Limitation Zone (ELZ): Limits equipment from tracking within the established zone except where noted previously in Class III protections. Equipment may "reach-in" and treat vegetation within the buffer as long as the tracks remain outside of the ELZ.
Watercourse designation shall be indicated on a map, located in **Appendix C**. Contractor will be given a copy of the map and be made aware of the protection measure prior to the start of operations.
All areas below the stream and lake transition line will be kept free of slash and debris. Accidental deposits of material in the watercourse, bed bank or channel shall be immediately removed.

Mitigation Measure #13: Tribal:

- Cultural sites may be assigned an Equipment Exclusion Zones (EEZ), as determined in consultation with a CAL FIRE State Archaeologist or consulting Archaeologist, to protect the integrity of the site.
- No ground disturbing operations of any kind shall occur within the EEZ of a cultural site.
- All site EEZ's will be flagged prior to operations.
- Trees/snags designated to be removed within striking distance will be directionally felled away from sites.
- Use of heavy equipment within EEZ boundaries may include, but is not limited to, existing roads, tractor trails, and/or landings.
- Meeting between Registered Professional Forester or supervised designee familiar with on-site conditions and contractors to go over site location and protection measures.
- Contractors shall be required to protect the recorded sites described herein and any cultural resources uncovered during the project operations.
- If any cultural resources are found during project implementation, project activities within 100 ft. of the newly discovered cultural resource shall be immediately halted and notification given to landowner and RPF.
- The RPF shall initiate site review and notify and consult with Registered Professional Archaeologist for site-specific protection measures, and site recording notification will be provided to the appropriate Native American tribal groups and Archaeologist.
- If human remains are discovered, the County Coroner and the CAL FIRE Archaeologist must be contacted within 24 hours. Work may not resume until clearance is granted by the CAL FIRE Archeologist.

- Site specific mitigation measures are detailed in the confidential Archaeological Survey Report (ASR).

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:

1. The proposed project will have no effect related to Agricultural Resources, Energy, Land Use and Planning, Mineral Resources, Population and Housing, Public Servies, Transportation, and Utilities and Service Systems

2. The proposed project will have a less than significant impact on Aesthetics, Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, and Recreation.

3. Mitigation is required to reduce potentially significant impacts related to Biological Resources, Cultural Resources, Geology and Soils, Tribal Cultural Resources, Wildfire, 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.

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.

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	☒ Tribal Cultural Resources
☒ Cultural Resources	☐ Mineral Resources	☐ Utilities and Service Systems
☐ Energy	☒ Noise	☒ Wildfire
☒ Geology and Soils	☐ Population and Housing	☒ Mandatory Findings of Significance

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
6569EF653A04422...

1/16/2024

John Melvin, Assistant Deputy Director
California Department of Forestry and Fire Protection
Resource Management-Environmental Protection Program

Date

Environmental Checklist and Discussion

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?	☐	☐	☒	☐

The project is proposed on properties which would not impact any public significant or prominent scenic vistas. The project borders the highway 120 right of way to the north though it does not provide any scenic vistas from this vantage. This section does not fall into highway 120's scenic highway corridor.[1] The project includes thinning and release of suppressed, decadent and overstocked vegetation via mechanical methods and may cause minor visual impacts due to the resulting chip layer and ground disturbance. This effect is short term and will last approximately one to two growing seasons after treatment. After which the project will increase the aesthetic values of vista and in general by opening sightlines and improving the health and vigor of the residual vegetation.

	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?	☐	☐	☐	☒

The project will not substantially damage scenic resources contributing to aesthetic value of a state scenic highway.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Except as provided in Public Resources Code § 21099, in non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

The project exists in the WUI. The footprint falls within both of non-urbanized and urbanized areas. The project would temporarily degrade the visual character in the short term due to the nature of mastication and fuel reduction. The project inherently reduces the amount of vegetation by shredding and integrated it into the soil. This degraded visual character lasts for approximately 1- 2 growing seasons after which the resulting forest stand structure has drastically increased the visual character by increasing the vigor and water

[1] https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

yield of the remaining vegetation and opening up sight lines through the understory and canopy as well as decreasing the number of decadent trees and shrubs.

	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?	☐	☐	☐	☒

Not applicable, the project would not produce a new source of substantial light or glare.

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?	☐	☐	☐	☒

According to the California Resource Agencies data[2] the majority of the project lies on land designated as "Grazing Land". Land on which the existing vegetation is suited to the grazing of livestock. This category is used only in California and was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups.

	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?	☐	☐	☐	☒

The project is compatible to this use.

	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))?	☐	☐	☐	☒

The project is compatible to this use. Zoning map is available in **Appendix C**

	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?	☐	☐	☐	☒

The project will not convert the forest land to non-forest uses. The project inherently will protect and improve forest land.

[2] See Important Farmland Map on Page 11

	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?	☐	☐	☐	☒

This project will not convert any land to nonagricultural uses.

AIR QUALITY

Project setting:
The project is situated Tuolumne County within the Mountain Counties Air Basin (MCAB) and falls under the jurisdiction of the Tuolumne County Air Pollution Control District (TCAPCD). The TCAPCD consists of small towns and rural communities. The Tuolumne County portion of the MCAB is a nonattainment area for the state standards for ozone (CARB 2017) and is unclassified or in attainment for the federal standards for ozone and for the federal and state standards for CO_2, nitrogen dioxide, SO2, PM10, PM2.5, and lead (CARB 2015). TCAPCD is responsible for implementing emissions standards and other requirements of federal and state laws regarding most types of stationary emission sources. CARB has determined that the ozone levels in Tuolumne County are caused by "overwhelming transport" of emissions into the air district (CAPCOA 2015). Therefore, the TCAPCD is relieved from preparing an attainment plan for ozone, and no other criteria air pollutant levels are high enough to require an attainment plan. Although there are no required attainment plans, or other local plans specifically addressing air quality, Tuolumne County must conform to existing state and federal air quality standards.[3]

Criteria air pollutants are substances regulated by federal and state governments with established outdoor concentration standards to safeguard public health. These pollutants include volatile organic compounds (VOCs), also known as reactive organic gases (ROGs), nitrogen oxides (NOx), carbon monoxide (CO), sulfur oxides (SOx), particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM10), and particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM2.5). VOCs and NOx are particularly significant as they contribute to the formation of ozone (O3). Construction activities typically generate criteria air pollutants through the operation of off-road construction equipment, on-road hauling and material delivery trucks, and worker commuting. Motor vehicles are the primary sources of CO and NOx emissions, while mobile sources and agricultural operations contribute to ROG emissions.

A project would have a significant impact on air quality if, pursuant to Tuolumne County Air Pollution Control District regulations, it would result in project-generated emissions in excess of the following used by the Tuolumne County Air Pollution Control District:

- Reactive Organic Gases (ROG) – 1,000 lbs/day or 100 tons per year.
- Oxides of Nitrogen (NOx) – 1,000 lbs/day or 100 tons per year.
- Particulate Matter (PM10) – 1,000 lbs/day or 100 tons per year.
- Carbon Monoxide (CO) – 1,000 lbs/day or 100 tons per year. [4]

To assess the project's impact on air quality, the significance criteria are determined based on the

[3] https://www.tuolumnecounty.ca.gov/DocumentCenter/View/11300/Section-33

[4] www.tuolumnecounty.ca.gov/DocumentCenter/View/1072/TCAPCD_Significance_Thresholds__2_?bidId=

recommendations outlined in Appendix G of the CEQA Guidelines. Additionally, Appendix G of the State CEQA Guidelines states that, if available, the significance criteria established by the relevant air quality management district can be used to determine whether a project would have a significant impact on air quality. The TCAPCD has set thresholds to evaluate the significance of air quality impacts resulting from a project stated above.

The project's emissions do not cause or contribute to exceeding state or federal ambient CO emissions, the impacts would be considered less than significant.

	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?	☐	☐	☒	☐

The proposed project will not conflict with or obstruct the implementation of the air quality act.
The use of vehicles and mechanical equipment would not result in emissions of criteria pollutants that could exceed Tuolumne County General Plan, California Ambient Air Quality Standards (CAAQS) or National Ambient Quality Standards (NAAQS) thresholds.
Vehicle miles traveled (VMT) is the largest component adding to PM, CO, NOx and ROG now defined as volatile organic compounds (VOC) to the atmosphere are motor vehicles in this case heavy equipment.
The proposed project is not anticipated to conflict with the TCAPD threshold Plan because the project is limited to vegetation management and fuels reduction activities. The project would not result in new buildings or structures that would facilitate population growth or increased VMT in the area. A temporary increase in VMT caused by worker vehicles, equipment, and trucks would occur during implementation of the project. Crew rigs are anticipated to generate up to 3 vehicle trips per day for transportation and additional trips would be generated by other worker trucks, fuel trucks, and service trucks. Equipment would be stored on existing landings within the project area and would not require daily trips to and from the site. The increase in VMT would be temporary in nature and would be reduced using carpooling to reduce individual worker trips to and from the project site.

Implementation of the project would result in a reduced risk for wildfire, which would release substantial pollutant emission in the event of a wildfire event. Additionally, the project does not propose new buildings or expanded infrastructure that would facilitate population growth or increase VMT to the area. Implementation of the project would result in a temporary increase of VMT; however, it would be temporary in nature and would be necessary to conduct project activities to protect against wildfire. Therefore, impacts would 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?	☐	☐	☒	☐

The Tuolumne County portion of the MCAB is a nonattainment area for the state standards for ozone (CARB 2017) and is unclassified or in attainment for the federal standards for ozone and for the federal and state standards for CO, nitrogen dioxide, SO2, PM10, PM2.5, and lead (CARB 2015).

Proposed activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, and soil disturbance) and off-site sources (i.e., worker vehicle trips). Project emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions.
The project is not expected to result in a cumulatively considerable net increase of the criteria pollutant for which the project region is unclassified under an applicable federal or state ambient air quality standard.

Although project activities would result in short-term localized and mobile emissions, implementation of the project would be beneficial in the long-term by reducing the risk for future catastrophic wildfire and associated pollutant emissions.

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

Although project activities would result in short-term localized and mobile emissions, implementation of the project would be beneficial in the long-term by reducing the risk for future catastrophic wildfire and associated pollutant emissions.

No long-term impact on air quality will result from this project.

Best available control measures will be utilized to minimize the short-term impacts of emissions from the project.

- Keep vehicle/ equipment idling times to no longer than 5 minutes.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications.

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

It is possible that odors could be released during implementation of the proposed treatment activities. Objectionable odors could be generated from vehicles and/or equipment exhaust emissions.
The proposed treatment activities would occur in areas located away from residences and other occupied facilities, and the project does not include activities that are expected to result in odors inconsistent with normal motor vehicle or landscaping equipment operation; therefore, adverse effects are not anticipated. The project would comply with all applicable CARB and TCAPCD regulations. The potential release of odors associated with treatment activities and equipment would be minor, temporary, and unlikely to be detectable from rural residential or public places in the vicinity of the project due to the distance; therefore, impacts would be less than significant.

BIOLOGICAL RESOURCES

	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?	☐	☒	☐	☐

On 3/17/2023 a 9-quadrangle and 3-mile radius query of the California Natural Diversity Database (CNDDB) was conducted. 38 endangered, threatened, or sensitive species were identified within the 9-quad search. Of the 38, 22 species had potential habitat within the project. 8 species were found within the 3-mile radius and 1 within the project area. On 5/22/2023 and 10/2/2023 the CNDDB query was repeated to ensure that additional species were not added to the list; there were no new special-status species in the report. The California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Services (USFWS) was notified by email and provided a description of recommendations. CDFW and USFWS were further consulted for species specific mitigation measures. Additionally, CDFW was notified of the fact that there was a confirmed GGO nest during the 2023 nesting season. All correspondence is documented in **Appendix D.** A Biological Assessment was created by Justin Walker and William Dorrell. With implementation of mitigation measures as described above, and in **Appendix B** the project is not expected to have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status in local or regional plans, policies, or regulation or by the California Department of Fish and Wildlife or the US Fish and Wildlife Service. See **Appendix B** for a summary of the CNDDB findings.

Through CNDDB search and field surveys the below list of species was identified to be potentially affected by PMLFR project. Mitigation measures have been utilized to achieve avoidance of specific species.

Species identified are: FYLF, Bald Eagle, GGO, CSO, Crotch Bumble Bee, Small's southern clarkia, Mariposa clarkia, yellow-lip pansy monkeyflower, slender-stemmed monkey flower, Tuolumne fawn lily, and WPT.

	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?	☐	☒	☐	☐

The project is not expected to have a substantial adverse impact on any riparian habitat, or other sensitive species/ habitat within local or regional plans set forth by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service. The **Appendix B** will be incorporated into the project protections standards and mitigation measures. The project will retain and improve nesting and foraging habitat for critical species. The project proposes take and impact avoidance for any sensitive species.

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	☐	☐	☐	☒

There are no state or federal wetlands within the project area.

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	☐	☐	☒	☐

The project is not expected to have a substantial adverse effect, either directly or through habitat modifications, on 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. As noted in the deer habitat map located in **Appendix C** a significant portion of the project lies on key habitat for the Yosemite migrant deer herd. It should be noted that the project will improve nesting, foraging, floristic diversity for a variety of species as well as reduce the risk of catastrophic wildfire and complete stand replacement. The project will cover 6 different wildlife habitats as mapped by the Tuolumne County General Plan's Wildlife Habitat relationships. See Tuolumne County Wildlife Habitat map in **Appendix C**.

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

On April 1, 2008, the Board of Supervisors adopted Ordinance 2903 which added chapter 9.24 to the Tuolumne County Ordinance Code. Chapter 9.24 is intended to discourage the premature removal of oak trees by establishing procedures and penalties for such removal.
However, this project falls under exemption C: Removal of native oak trees in conjunction with a timber harvest plan or other plan approved by the California Department of Forestry and Fire Protection.

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	☐	☒	☐	☐

There is no conservation plan or easement for the properties under this plan. There are some restrictions set

forth under the Motherlode Land Trust lands which were obtained through a Wildlife Conservation Board (WCB) Grant: The property shall be held and used for the purposes of protecting habitat and that supports threatened and endangered species and for compatible public or private uses, all as may be consistent with wildlife habitat preservation and protection of sensitive biological resources (individually and collectively, the "Purposes of Grant".)

The project will protect nesting and foraging habitat for threatened and endangered species as provided in **Appendix B** and the **Mitigation Measures**. The impact will be less than significant with mitigations incorporated.

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?	☐	☒	☐	☐

Numerous historical sites are located on and adjacent to the project area. The confidential ASR in describes each in detail. Implementation of the protection measures within the ASR should prevent substantial adverse change to a historical resource. Mitigation measures have been added to ensure that all potential impacts to historic and cultural resources are reduced to a less than significant level. As such, it is not expected the proposed project will result in any significant damages to any archaeological or historic resources.

	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?	☐	☒	☐	☐

Mitigation measures have been added to ensure that all potential impacts to historic and cultural resources are reduced to a less than significant level. As such, it is not expected the proposed project will result in any significant damages to any archaeological or historic resources.

	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?	☐	☒	☐	☐

The project is not expected to disturb any human remains, including those interred outside of formal cemeteries. Archaeological procedures for projects were undertaken in the preparation of this project. An archaeological records check was obtained on 1/23/2023. The Native American consultations were completed. No known burial or internment sites are located on the project area. Mitigation measures have been added to ensure that all potential impacts to any newly discovered burial or internment sites are reduced to a less than significant level. The confidential ASR describes each in detail, but specific site locations are confidential. No known cemeteries are known within the project footprint. Implementation of the protection measures within the ASR should prevent substantial adverse change to a historical resource. Mitigation measures have been added to ensure that all potential impacts to historic and cultural resources are reduced

to a less than significant level.
As such, it is not expected the proposed project will result in any significant impacts to any archaeological or historic resources. See **Mitigation Measures** for details.

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?	☐	☐	☐	☒

Not applicable.

	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?	☐	☐	☐	☒

Not applicable.

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.)	☐	☐	☐	☒

The project will not result in any impact to earthquake faults.

	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?	☐	☐	☐	☒

The project is small in nature and does not have the capability to cause seismic ground shaking.

	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 liquefaction zones are located near the project site. The project is small in nature and does not have the capability to cause any liquefaction events.

	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?	☐	☒	☐	☐

Significant erosion from landslides will be prevented by avoidance of heavy equipment used on steep slopes (>50%) or near watercourses detailed in **Mitigation Measures** or saturated soils. Organic materials will be worked into the soil via mastication lessening erosion hazard. Grazing will be timed to avoid oversaturated soils as well as over grazing. These operations shall not occur on saturated soil conditions, and this condition will be determined and enforced by the RPF or supervised designee. See **Mitigation Measures** section for details.

	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?	☐	☒	☐	☐

Significant erosion from loss of topsoil will be prevented by avoidance of heavy equipment used on steep slopes (>50%) or near watercourses detailed in **Mitigation Measures** or saturated soils. Organic materials will be worked into the soil via mastication lessening erosion hazard. Grazing will be timed to avoid oversaturated soils as well as over grazing. These operations shall not occur on saturated soil conditions, and this condition will be determined and enforced by the RPF or supervised designee. See **Mitigation Measures** section for details.

	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?	☐	☒	☐	☐

Significant erosion from on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse will be prevented by avoidance of heavy equipment used on steep slopes (>50%) or near watercourses detailed in **Mitigations Measures** or saturated soils. Organic materials will be worked into the soil via mastication lessening erosion hazard. Grazing will be timed to avoid oversaturated soils as well as over grazing. These operations shall not occur on saturated soil conditions, and this condition will be determined and enforced by the RPF or supervised designee. There are 2 geologic units within the project area, see **Appendix C** for a map. No unstable soil types exist within the project area. This project should not result in any unstable soil. See **Mitigation Measures** section for details.

	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?	☐	☐	☐	☒

Not applicable. Project would result in no impact.

	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?	☐	☐	☐	☒

Not applicable. Project would result in no impact.

	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?	☐	☐	☐	☒

Not applicable. Project would result in no impact.

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?	☐	☐	☒	☐

Understory (including manzanita, ceanothus, poison oak and saplings) and suppressed sub-merchantable trees will be the primary target of fuels reduction leaving intermediate, dominant and codominant trees, which should improve their ability to sequester carbon. The proposed practices are expected to make the residual

stands more resilient to catastrophic stand replacing wildfires. Over time the carbon that is stored in vegetation will be released as part of the normal carbon cycle. Carbon will also be sequestered overtime as new vegetation grows if the land remains productive. Mechanical and herbivory treatments are tools to help maintain those carbon stocks over time. By reducing the probability of catastrophic wildfire prescribed fire can increase the probability of survival of the overstory trees allowing them to continue to sequester carbon. The carbon released by the treatments will be re-sequestered by the remaining living trees and new vegetation following fuel reduction. This has the potential to reduce the massive increase in short term emissions from wildfire and spread the emissions over a longer period while allowing sequestration to occur in the remaining vegetation. The amount of greenhouse gasses being emitted by this project are less than significant, especially when compared to the alternative of a stand replacement intensity fire. Project is expected to generate approximately 363.39 MT CO2e, quantitative analysis located in **Appendix C.**

	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?	☐	☐	☐	☒

The project is designed to reduce the chance of a large catastrophic wildfire emitting large amounts of emissions. The project is not expected to conflict with an applicable plan, policy or regulation adopted for reducing the emissions of greenhouse gases.

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?	☐	☒	☐	☐

Small amounts of petroleum product will be transported for the use of this project. No fueling within 100 feet of watercourses. No other hazardous materials will be transported or used. See **Mitigation Measures** for details.

	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?	☐	☐	☒	☐

It is possible that petroleum product could be released to the environment, resulting in a minor hazardous waste spill. Spills could result from transport of fuel, or a leak/major malfunction of forestry equipment. Equipment will be kept clean and inspected for leaks. Leaks will be repaired. Spill kits will be on site, spills of chemicals will be contained and properly disposed of.

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	☐	☐	☐	☒

Not within ¼ mile of a school.

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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	☐	☐	☐	☒

No, 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?	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	☐	☐	☒	☐

All of the project lies within 2 miles of the Pine Mountain Lake Airport see **Appendix C** for zoning maps. Several of the parcels within the project are zoned with a secondary zoning of Airport Influence Zone (AIR) Chapter 18.24 of the Tuolumne County Ordinance code. Noise will not be a factor for local workers or residence as this airport is rural and has a low volume of traffic. Noise impact will be limited to normal operating hours. Work will not be stationary, noise levels in any given area will be temporary.

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

The project will not negatively affect the current emergency response or evacuation plan. It does have the possibility to positively affect emergency planning in regards to WUI and wildfire defense.

	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?	☐	☐	☐	☒

The project has been developed to reduce the fire hazard severity and fire potential in the area.

HYDROLOGY AND WATER QUALITY

Defined by the California Interagency Watershed Map of 1999 the project lies in the following designated watersheds: Pine Mountain Lake (6536.400503), Grapevine Creek (6536.400504), Hells Hollow Creek (6536.400502). The project falls under the purview of the *Federal*- Clean Water Act, *State*- Porter-Cologne Water Quality Control Act, *County*- Tuolumne-Stanislaus Integrated Regional Water Management Plan. The Central Valley Water Quality Control Board Region 5S is the governing body which oversees operations in the project region. An email was sent to the Central Valley Water Board in Rancho Cordova notifying them of the project on June 1, 2023 available in **Appendix D.**

	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?	☐	☐	☐	☒

The project will not violate any water quality standards, waste discharge requirements and will not substantially degrade surface or ground water quality.

	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?	☐	☐	☐	☒

The project may increase short term ground water availability by reducing surface vegetation.

	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?	☐	☐	☒	☐

The reduction in understory vegetation through mastication and herbivory may increase groundwater availability. Mastication will retain organic material in the surface soils mitigating surface runoff. The project is not expected to substantially alter watercourse or drainage patterns.

	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?	☐	☐	☒	☐

The reduction in surface level vegetation may result in a slight increase in surface runoff. Adequate residual vegetation and embedded organic matter will be retained to minimize surface runoff. The project is not expected to substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding.

	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?	☐	☐	☐	☒

This project is located in a rural area with no existing stormwater systems which would be affected. No additional sources of polluted runoff are expected to be resulted from this project.

	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?	☐	☒	☐	☐

The reduction in understory vegetation through mastication and herbivory may increase surface runoff. Mastication will retain organic material in the surface soils mitigating surface runoff. Drainage patterns of the site or area will not be substantially altered. Watercourses will be designated in to separate classifications and have an EEZ/ ELZ flagged to enforce these buffers. Additionally, any accidental deposits of material deposited into a watercourse shall be immediately removed and all areas below the stream and lake transition line will be kept free of slash and debris. Details for the previous stated EEZ/ ELZ and mitigations detailed

in **Mitigation Measures**. After mitigation the project is not expected to substantially alter watercourse or drainage patterns.

	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?	☐	☐	☐	☒

The project is not located within a flood, tsunami or seiche zone.

	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?	☐	☐	☒	☐

2007 was the most recent draft of the Tuolumne County Water Quality Plan (TCWQP). The relevant priorities were, soil erosion and sediment delivery to waterways. “The improvement of forest health, including the reduction of factors which may contribute to the severity of wildfires in the watershed.” was listed on the priority list. This project is in line with the goals of the TCWQP.

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?	☐	☐	☐	☒

The project is in the WUI area east of the community of Pine Mountain Lake, this will not divide the community but protect it.

	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?	☐	☐	☐	☒

The Mother Lode Land Trust (MLLT), major landowners within the project, have a Notice of Unrecorded Grant Agreement (NUGA) with the California Wildlife Conservation Board (WCB). This NUGA states “The Property shall be held and used for the purposes of protecting habitat that supports threatened and endangered species and for the compatible public or private uses all as may be consistent with the wildlife habitat preservation and protection of sensitive biological resources (individually and collectively, the “Purposes of Grant”)”. The project will not impact this agreement and is in line with protecting habitat that supports threatened and endangered species.

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?	☐	☐	☐	☒

There is no known significant mineral resource that would be of value to the region and the residents of the state within the project boundaries.

	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?	☐	☐	☐	☒

The project is not expected to result in the loss of availability of locally important mineral resource recovery site.

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?	☐	☐	☒	☐

Tuolumne County does not have a noise ordinance. The project would include large trucks hauling crews and heavy equipment to the site. These haul trucks would need to pass by residential areas and the event of each truck passing would increase the single event noise levels. Most haul trips would occur during daytime hours, which avoid the potential to cause sleep disturbance to residents. The project setting is in a WUI. The majority of the project is located at a distance far enough away from residences or topographic features which will diminish or impede the sound from reaching above. The areas which are adjacent to the residential areas will temporarily increase the ambient noise within the residential zones. This noise level increase will be transient and temporary. This will not warrant mitigations outside of the normal operating procedures for working around residential areas. Such as when working with in the vicinity of the residential homes the hours of operation will be limited to 7:00 am to 7:00 pm Monday through Saturday. Noise generating activities will be prohibited on Sunday and County Holidays.

	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?	☐	☐	☒	☐

Some minor noise and vibration is expected from the mastication equipment, the effects will have a less than significant impact.

	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?	☐	☐	☒	☐

All of the project lies within 2 miles of the Pine Mountain Lake Airport. Several of the parcels within the project are zoned with a secondary zoning of Airport Influence Zone (AIR) Chapter 18.24 of the Tuolumne County Ordinance code. Noise level increase will be transient and temporary. This will not warrant mitigations outside of the normal operating procedures for working around residential areas.

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

This project will not induce population growth.

	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?	☐	☐	☐	☒

This project will not displace any people or housing.

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 governmental facilities or services will be impacted from this project.

	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?	☐	☐	☐	☒

No governmental facilities or services will be impacted from this project.

	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 governmental facilities or services will be impacted from this project.

	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 governmental facilities or services will be impacted from this project.

	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 governmental facilities or services will be impacted from this project.

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?	☐	☐	☒	☐

Currently the Long Gulch Ranch portion of the project has been working with the community of Groveland to offer equestrian, hiking, and other recreation opportunities on the property. Trails on the property are visible but are in a state of disrepair. The fuels reduction would reduce vegetation and open up access to these trails increasing the use of these facilities. No physical facilities exist within this trail network. The only effect would be increased use of the trails. Pine Mountain Lake association has roads used as walking trails for the local community which access the Long Gulch Ranch trail system. Substantial physical deterioration is not expected to result from this project. Other properties within this project are private properties and do not have public recreation facilities.

	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?	☐	☐	☐	☒

This project does not propose or require the construction or expansion of recreation facilities.

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?	☐	☐	☐	☒

The proposed project does not conflict with any program, ordinance or policy addressing the circulation system.

	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)?	☐	☐	☐	☒

This project is small in nature and will not affect greenhouse gas emissions thresholds.

	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)?	☐	☐	☐	☒

The proposed project will have no effect on traffic patterns.

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

This project will increase access for emergency fire access across the project. It will not negatively affect any other emergency access.

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)?	

An archaeological records check was obtained on 1/23/2023. An ASR completed by RPF Will Dorrell and supervised designees Justin Walker and Troy Stull to discuss protection measures and implementation of the proposed protection measures.

Only one lithic scatter site with shards and tools is recorded on the project area. The ASR describes this site in detail, but the specific site location is confidential. Implementation of the protection measures within the ASR should prevent substantial adverse change to any tribal cultural resources. Mitigation measures have been added to ensure that all potential impacts to historic and cultural resources are reduced to less than significant levels.

Implementation of protection measures within the ASR should prevent substantial adverse change to a Tribal Cultural resource.

	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 subdivision (c) of Public Resources Code § 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

An archaeological records check was obtained on 1/23/2023. An ASR completed by RPF Will Dorrell and supervised designees Justin Walker and Troy Stull discuss protection measures and implementation of the proposed protection measures.

Only one lithic scatter site with shards and tools is recorded on the project area. The ASR describes this site in detail, but the specific site location is confidential. Implementation of the protection measures within the ASR should prevent substantial adverse change to any tribal cultural resources. Mitigation measures have been added to ensure that all potential impacts to historic and cultural resources are reduced to less than significant levels.

Implementation of protection measures within the ASR should prevent substantial adverse change to a Tribal Cultural resource.

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?	☐	☐	☐	☒

The proposed project will not result in construction of new or expanded utility systems.

	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?	☐	☐	☐	☒

The proposed project will not result in needed changes to water development only limited water use will be needed for the project.

	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?	☐	☐	☐	☒

The proposed project will not result in needed changes to wastewater developments.

	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?	☐	☐	☐	☒

The proposed project will not require landfill accommodations for the implementation of 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?	☐	☐	☐	☒

Not applicable.

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?	☐	☐	☐	☒

The project has been developed to reduce the fire risk. The project will not impair any emergency response or evacuation plans and should increase the effectiveness of said plans.

	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, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

The project has been developed to reduce the fire hazard severity. The project will not exacerbate wildfire risks.

	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 ongoing impacts to the environment?	☐	☐	☐	☒

The project is designed to reduce the fire hazard by reducing flammable fuels. No new roads, water sources, power lines or other utilities will be necessary as a result of this project.

	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?	☐	☒	☐	☐

The project is designed to reduce the fire risk. Fuels treatment will temporarily increase surface level runoff due to decrease in understory vegetation. Integration of organic matter into the soil substrate, WLPZ and EEZ limitations, saturated & erosive soils and slope limitations will mitigate post fire downstream flooding and landslides. See **Mitigation Measure #10 & 12** for avoidance measures.

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?	☐	☒	☐	☐

On 3/17/2023 a 9-quadrangle and 3-mile radius query of the California Natural Diversity Database (CNDDB) was conducted. 38 endangered, threatened or sensitive species were identified within the 9-quad search. Of the 38, 22 species had potential habitat within the project. 8 species were found within the 3-mile radius and 1 within the project area. On 5/22/2023 and 10/2/2023 the CNDDB query was repeated to ensure that additional species were not added to the list; there were no new special-status species in the report. The California Department of Fish and Wildlife (CDFW) was notified by email. CDFW provided recommendations which were incorporated into the protection measures. A Biological Assessment was created by Justin Walker and William Dorrell. The project is not expected to have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status in local or regional plans, policies, or regulation or by the California Department of Fish and Wildlife or the US Fish and Wildlife services. Findings and discussion are available for review in **Appendix B.**

An archaeological and historic records check was obtained on 1/23/2023. An Archaeological Survey Report (ASR) completed by Justin Walker, Troy Stull and William Dorrell to discuss protection measures and implementation of the protection measures.

Several historic sites and only prehistoric site are recorded on the project area. The ASR describes this site in detail, but the specific site location is confidential. Implementation of protection measures within the ASR should prevent substantial adverse change to a historical resource.

No substantial degradation to the environment, fish and wildlife habitat, fish or wildlife population, plant or animal community, endangered species, or cultural resource is expected to 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 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.)	☐	☐	☐	☒

Cumulative effects are not anticipated for the proposed project. The project was designed to be complimentary to allow the Lead Agency to coordinate treatments over an increasingly large area. Doing so allows agencies flexibility to tailor treatments across the landscape. Fuel treatment activities are typically scheduled during normal working hours (7am – 7pm) so nocturnal animals would not be affected by activities and noise from project activities would deter wildlife from entering the project area. Ultimately, the cumulative effects would benefit the environment by habitat improvement, and benefit the surrounding communities by the reduction of wildfire risk. This project is being prepared by a Registered Professional Forester. Consultation with resource professionals from CAL FIRE and Tuolumne County Resource Conservation District as part of the scoping process for this project to ensure that any negative cumulative effects are avoided.

	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?	☐	☐	☐	☒

Not applicable

APPENDIX A

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.

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: FYLF- If species is found near or in the project area, a 300-foot no work zone will be established around all suitable habitat. A qualified RPF, supervised designee, or biologist familiar with species identification and life history shall survey for amphibians during the survey period, prior to operations, each year that operations may occur. In the case of a detection, the 300' no work zone will extend 300' from the high-water mark of the watercourse. These protection measures will be designated on the ground by the RPF or supervised designee using flagging; the color, meaning and location of the flagging will be communicated to create proper understanding with all operators on the project.

Schedule: Each year of operations prior to project-related activities.
Responsible Party: A Registered Professional Forester (RPF), RPF supervised designee, or biologist.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #2: Bald Eagle- For work being performed from February 1 to September 15 a nesting bird survey will be completed prior to the start of each year of operations. If an active nest is found, a 0.5 mile no disturbance buffer will be placed on the nest until the chicks have fledged. Unless the trees pose a hazard to the public or project workers the project will retain nesting habitat, large prominent snags (especially ponderosa pine).

Schedule: Each year of operations prior to project-related activities.
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #3: GGO- ¼ mile no-work buffer will be placed around any Great gray owl nest identified during any year of operations until chicks have fledged, with an additional 15-day monitoring period to ensure that final fledglings are not active on or near the ground. This will be monitored by a qualified RPF or RPF designee. Within the ¼ mile buffer from the nest, lower limbs will be left to provide residual habitat characteristics to facilitate fledgling habitat. Due to there being a confirmed active Great Gray Owl nest within the project in 2023, any potential Great Gray Owl nesting habitat within the project where the species could be impacted, shall be surveyed by a qualified RPF or RPF supervised designee, during the survey period and prior to operations, each year that operations may occur within the critical period. It is not possible to properly survey within ¼ mile of the project due to the restraints of private land ownership. Additionally, unless the trees pose a hazard to the public or project workers, the project will retain nesting habitat, large live or dead trees with defects or decaying wood and cavities.

Schedule: Each year of operations prior to project-related activities.
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #4: California Spotted Owl- Nesting habitat within the project where the species could be impacted shall be surveyed by a qualified RPF or RPF supervised designee, during the survey period, prior to operations, each year that operations may occur within the critical period. Surveys will occur within the project footprint prior to operation when operations occur during the nesting period (February 1 to September 15). If active nest(s) are found within or adjacent to the project footprint a ¼ mile no operations buffer will be placed on the nest tree until chicks have fledged. Suitable nest trees (i.e., large live or dead trees with defects, decaying wood, or cavities) will not be removed unless it poses a hazard to the public or project workers. The project will retain nesting habitat (e.g., multistoried or complex structure, high canopy cover, large amounts of coarse woody debris).

Schedule: Each year of operations prior to project-related activities.
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #5: Crotch Bumble Bee- Surveys during floristic period. 25-foot EEZ will be flagged around active bumble bee nests. Surveyors will look for signs of ground nests pebbling of earth as well as in abandoned rodent burrows. A 10 foot no disturbance buffer will be placed surrounding the nest. Manual work with hand tools may be conducted between 10 and 25 feet from the nest. A minimum of 5 pollinator shrubs/trees per acre will be maintained where possible.

Schedule: Each year of operations prior to vegetation or ground disturbing activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #6: Botanical Species of Concern- including but not limited to Smalls's southern clarkia, Mariposa clarkia, yellow-lip pansy monkeyflower, slender-stemmed monkey flower, Tuolumne fawn lily **-** Botanical surveys were completed during floristic period on the project by a qualified RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Schedule: Each year of operations prior to ground disturbing activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #7: Western Pond Turtle- Focused visual surveys were completed on the project by a qualified RPF or RPF supervised designee. No presence of species was identified at the time of survey, but it is expected that this species is extant. If populations or individuals are detected, a 50-foot no disturbance buffer will be placed around the WPT nest. If nest cannot be identified a 100 foot no disturbance will be placed along the active watercourse.

Schedule: Each year of operations prior to ground disturbing activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #8: Cultural Sites:

- Cultural sites may be assigned an Equipment Exclusion Zone (EEZ) or an Equipment Limitation Zone (ELZ), as determined in consultation with a Registered Professional Archaeologist to protect the integrity of the site.
  - EEZ will be placed 25-feet around the site perimeter.
  - ELZ will be used on specific linear features: historic ditches. The ELZ will be 25 feet though the machine may reach in and masticate material.
- No ground disturbing operation of any kind shall occur within the EEZ of a cultural site.
- All EEZ and ELZ's will be flagged in blue and red prior to operations.
- Trees/snags within striking distance may be directionally felled away from sites.
- Use of heavy equipment within EEZ boundaries may include, but is not limited to existing roads, tractor trails and/or landings.

- A CAL FIRE State Archaeologist may approve additional or alternative site-specific protections measures prior to project activities occurring.
- Meeting between Registered Professional Forester (RPF) or supervised designee familiar with on-site conditions and Contractor will be conducted prior to start of operations.
- Project planners shall utilize site records to plan and designate protection measure placement to ensure adherence to prescribed protection measures.
- Contractors preforming work shall be required to protect the recorded sites described herein and any cultural resources uncovered during the project operations.
- If any new cultural resources are found during implementation, project activities within 100 feet of the newly discovered cultural resource shall be immediately halted and notification given to landowner and RPF.
- The RPF shall initiate site review and notify and consult with CAL FIRE State Archaeologist for site specific protection measures. New sites will be required to be recorded and the ASR will be amended and reviewed by the Consulting or CAL FIRE State Archaeologist.
- Site specific mitigation measures are detailed in the confidential Archaeological Survey Report (ASR).

Schedule: Each year of operations prior to project-related activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #9: Cultural 2:

- If human remains are discovered, the Tuolumne County Coroner and a CAL FIRE State Associate Archaeologist must be contacted within 24 hours. Work may not resume until clearance is granted by the CAL FIRE State Archaeologist.
- The RPF shall initiate site review and notify and consult with the consulting Archaeologist for site specific protection measures and its recording notification will be provided to the appropriate Native American tribal groups and Archaeologist.
- If any cultural resources are found during implementation, project activities within 100 feet of the newly discovered cultural resource shall be immediately halted and notification given to landowner and RPF.
- No ground disturbing operations of any kind shall occur within cultural sites.
- Site specific mitigation measures are detailed in the confidential Archaeological Survey Report (ASR).

Schedule: Each year of operations prior to project-related activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #10: Geology:

- No heavy equipment on excessively wet soil such as conditions that produce areas of ponded water, wheel rutting, spinning or churning of wheels or tracks.
- Slopes greater than 50% shall not be treated.
- Heavy equipment shall not work on slopes near watercourse within the equipment exclusion zones (EEZ) as defined in **Mitigation Measure #12.** EEZ's shall be flagged by RPF or supervised designee.

Schedule: Each year of operations prior to project-related activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #11: Hazardous Material:

- Refueling shall be completed 100 feet from a watercourse

Schedule: During operations.
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #12: Hydrology:

- Watercourses shall be classified into one of the following categories or "classes":
  - **V. Class I**: Domestic Supplies, including springs, onsite and/ or within 100 feet downstream of the operations area and/ or Fish always or seasonally present onsite, including habitat to sustain fish migration and spawning.
  - **VI. Class II:** Fish always or seasonally present offsite within 1000 feet down stream and/ or aquatic habitat form non-fish aquatic species.
  - **VII. Class III:** 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
  - **VIII. Class IV:** Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric, supply or other beneficial use
- Watercourses shall have the following protection measures by classification
  - **V. Class I:** 100-foot Equipment exclusion zone (EEZ) measured from the edge of the visible flood channel.
  - **VI. Class II:** 50-foot EEZ measured from the edge of the visible flood channel.

VII. **Class III:** 15- foot Equipment Limitation Zone measured from the centerline of the watercourse. Equipment may make crossings perpendicularly to the watercourse but may not track up and down within the ELZ. Crossings should be limited to as little as possible.

VIII. **Class IV:** 15-Foot EEZ on the uphill side of the watercourse measured from the top of the cut bank and a ELZ on the downhill side of the watercourse starting at the tow of the fill slope. Operators my "reach-in" and masticate vegetation on the downhill fill slope as long as soil disturbance is limited

- Watercourse Designation:

V. **Class I:** Shall be flagged in solid blue flagging at the edge of the EEZ

VI. **Class II:** Shall be flagging in solid blue flagging at the edge of the EEZ

VII. **Class III** shall be centerline flagged in blue and white candy-striped flagging.

VIII. **Class IV** shall be flagged at the edge of the EEZ on the uphill side in solid blue flagging, the downhill side/ toe of the slope will not be flagged.

Equipment Exclusion Zones (EEZ): Prohibit equipment from entering into except where there is an established road, crossing, or skid trail. No vegetation shall be treated by heavy equipment while in the EEZ.
Equipment Limitation Zone (ELZ): Limits equipment from tracking within the established zone except where noted previously in Class III protections. Equipment may "reach-in" and treat vegetation within the buffer as long as the tracks remain outside of the ELZ.
Watercourse designation shall be indicated on a map, located in **Appendix C**. Contractor will be given a copy of the map and be made aware of the protection measure prior to the start of operations.
All areas below the stream and lake transition line will be kept free of slash and debris. Accidental deposits of material in the watercourse, bed bank or channel shall be immediately removed.

Schedule: Each year of operations prior to project-related activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

Mitigation Measure #13: Tribal:

- Cultural sites may be assigned an Equipment Exclusion Zones (EEZ), as determined in consultation with a CAL FIRE State Archaeologist or consulting Archaeologist, to protect the integrity of the site.
- No ground disturbing operations of any kind shall occur within the EEZ of a cultural site.
- All site EEZ's will be flagged prior to operations.
- Trees/snags designated to be removed within striking distance will be directionally felled away from sites.
- Use of heavy equipment within EEZ boundaries may include, but is not limited to, existing roads, tractor trails, and/or landings.
- Meeting between Registered Professional Forester or supervised designee familiar with on-site conditions and contractors to go over site location and protection measures.
- Contractors shall be required to protect the recorded sites described herein and any cultural resources uncovered during the project operations.

- If any cultural resources are found during project implementation, project activities within 100 ft. of the newly discovered cultural resource shall be immediately halted and notification given to landowner and RPF.
- The RPF shall initiate site review and notify and consult with Registered Professional Archaeologist for site-specific protection measures, and site recording notification will be provided to the appropriate Native American tribal groups and Archaeologist.
- If human remains are discovered, the County Coroner and the CAL FIRE Archaeologist must be contacted within 24 hours. Work may not resume until clearance is granted by the CAL FIRE Archeologist.
- Site specific mitigation measures are detailed in the confidential Archaeological Survey Report (ASR).

Schedule: Each year of operations prior to project-related activities
Responsible Party: A Registered Professional Forester (RPF) or RPF designee.

Verification of Compliance:
Monitoring Party: TCRCD
Initials: _____
Date: _____

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

PREPARERS OF THIS DOCUMENT

William Dorrell, RPF#2311, California Reforestation, Inc.

Justin Walker, California Reforestation, Inc.

Troy Stull, California Reforestation, Inc.

EXPERTS CONSULTED

Margarita Gordus, Biologist, California Department of Fish and Wildlife

Gary Whitson, RPF#2516, CAL FIRE

Caroline Petersen, Environmental Scientist, CAL FIRE

Ian Vogel, Biologist, U.S. Fish and Wildlife Service.

REFERENCES CITED

https://www.uniondemocrat.com/news/article_adff8d12-9c4a-11ed-826e-f7ca03212006.html

https://bondaccountability.resources.ca.gov/Project.aspx?ProjectPK=16353&PropositionPK=48

https://ceqanet.opr.ca.gov/2022120395

https://www.hcd.ca.gov/community-development/disaster-recovery-programs/ndrc-attachment-f/docs/fuelbreak-corcoranrimtrucktrail(fuel%20break).pdf

https://osfm.fire.ca.gov/media/bdppiaqj/2020-tcu-fire-plan.pdf

https://hub-calfire-forestry.hub.arcgis.com/apps/CALFIRE-Forestry::forest-practice-watershed-mapper/explore

http://tuolumneco.granicus.com/MetaViewer.php?view_id=&event_id=201&meta_id=35864

CALIFORNIA REFORESTATION

Justin Walker <justin@calreforest.com>

Pine Mountain Lake Fuel Reduction

2 messages

Justin Walker <justin@calreforest.com> Thu, Jun 1, 2023 at 4:13 PM
To: "Gordus, Margarita@Wildlife" <margarita.gordus@wildlife.ca.gov>
Cc: Will Dorrell <will@calreforest.com>

Margarita,

Please find the attached letter notifying the water board of the Pine Mountain Lake Fuel Reduction Project.

--
Thank You,

Justin Walker
Forestry Technician

California Reforestation
Office (209) 586-2115
22230-A So. Colorado River Dr.
Sonora, CA 95370

PMLFR- CDFW Notification Letter.pdf
5136K

Gordus, Margarita@Wildlife <Margarita.Gordus@wildlife.ca.gov> Mon, Jun 5, 2023 at 2:15 PM
To: Justin Walker <justin@calreforest.com>
Cc: Will Dorrell <will@calreforest.com>, "Fisher, Austin@Wildlife" <Austin.Fisher@wildlife.ca.gov>

Hi Justin,

Thank you for the email. I will be on vacation starting tomorrow and will not return until 6/26, so this project has been assigned to CDFW R4 Environmental Scientist Austin Fisher for review. I have Cc'd him on this email.

Margarita Gordus

CDFW

(559) 207-6681

From: Justin Walker <justin@calreforest.com>
Sent: Thursday, June 1, 2023 4:14 PM
To: Gordus, Margarita@Wildlife <Margarita.Gordus@wildlife.ca.gov>
Cc: Will Dorrell <will@calreforest.com>
Subject: Pine Mountain Lake Fuel Reduction

[Quoted text hidden]

CALIFORNIA REFORESTATION INC.

CALIFORNIA REFORESTATION, INC.

22230-A So. Colorado River Drive • Sonora, California 95370
(209) 586-2115

June 1, 2023

Margarita Gordus
Senior Environmental Scientist Specialist
Department of Fish and Wildlife
Central Region
1234 E. Shaw Avenue
Fresno, CA 93710

Dear Ms. Gordus,

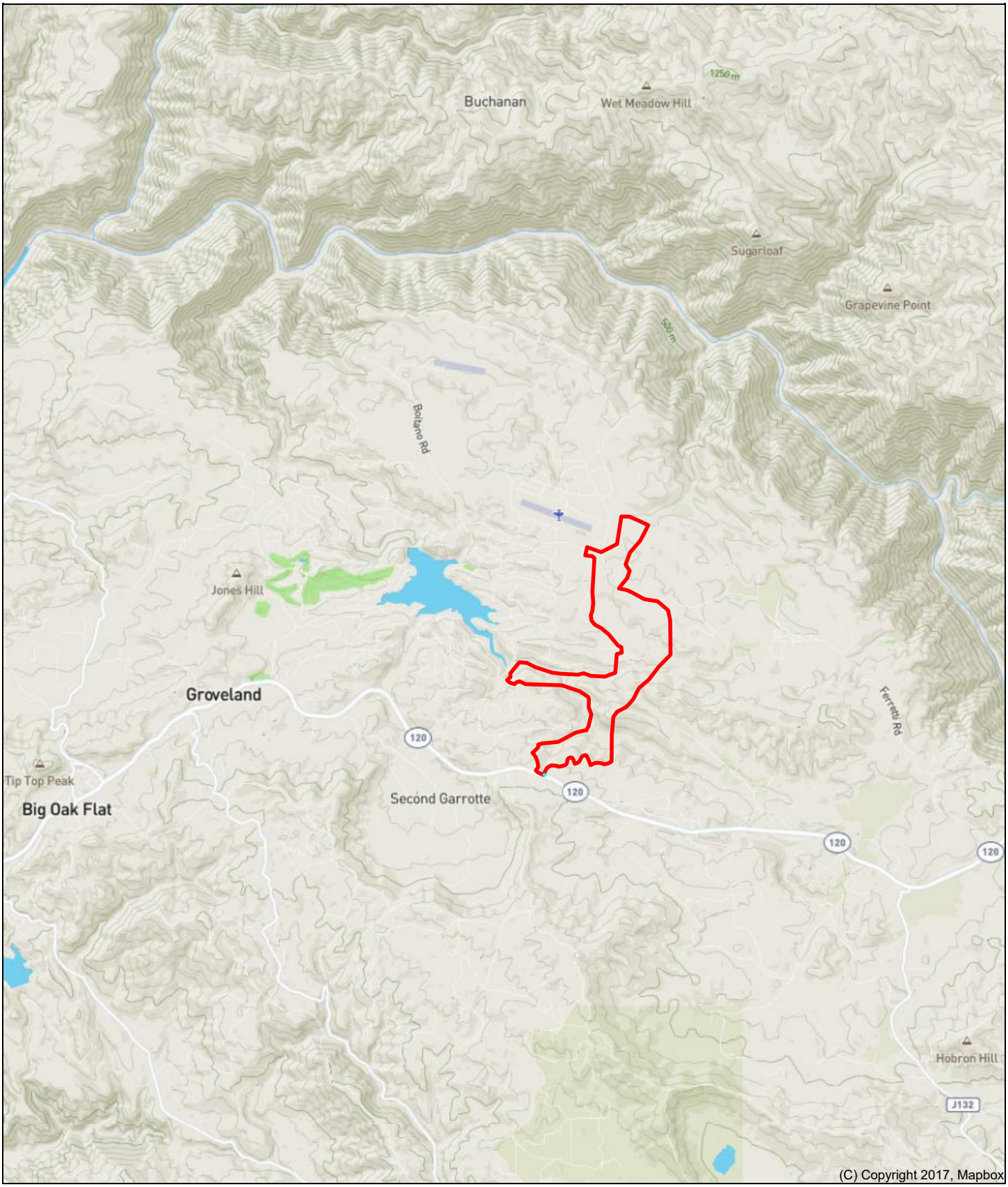
The Tuolumne Count Resource Conservation District (TCRCD) is preparing to conduct the Pine Mountain Lake Fuel Reduction Project. The project is located in the oak woodland/ oak- pine transition belt near Pine Mountain Lake in Tuolumne County. The fuel break is strategically situated East of the densely populated communities of Pine Mountain Lake subdivision and the greater community of Groveland. The fuel reduction project foot print resides on approximately 641 acres spanning approximately 20 parcels of densely vegetated oak, and shrub forest. Proposed project includes Mastication and goat grazing. Small isolated areas within unit may not be accessible to equipment because of either slope or other mechanical deterrent. In these areas, vegetation will be hand cut and lopped. Following or concurrent with mastication a hand crew will prune trees to a minimum height of 10 feet or maximum of ½ the height of the crown whichever is less. Slash created from pruning will be chipped or masticated.

This notification is to inform you of the proposed project, and provide you with an opportunity to comment on the project. If you have any information regarding resources within the proposed project area, or if you have any questions regarding the proposed project, please contact me before July 1, 2023 at the address and telephone number listed above. A project map has been enclosed for your review, thank you for your assistance.

Sincerely,

William Dorrell

RPF #2311



PMLFR Boundary

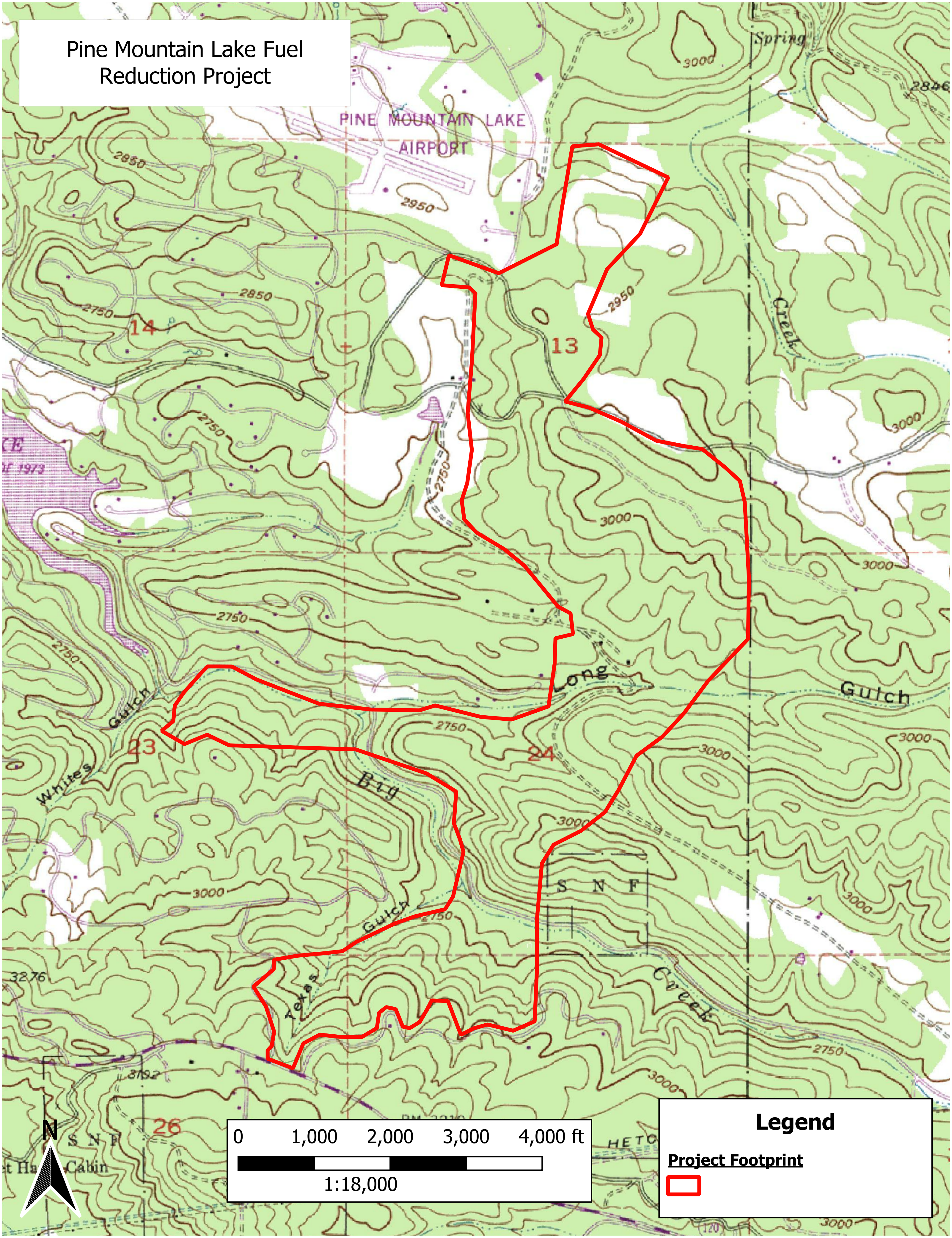
Declination

GN 1.72° E
MN 13.03° E

SCALE 1:75000

0 1
Mile

GROVELAND, CA



Pine Mountain Lake Fuel Reduction Project
PINE MOUNTAIN LAKE AIRPORT
Spring
Creek
Long Gulch
Big Gulch
Creek
Whites Gulch
Texas
S N F
13
14
23
24
26
N
0 1,000 2,000 3,000 4,000 ft
1:18,000
Legend
Project Footprint

CALIFORNIA REFORESTATION

Justin Walker <justin@calreforest.com>

Pine Mountain Lake Fuel Reduction Project

8 messages

Justin Walker <justin@calreforest.com> Thu, Nov 2, 2023 at 8:14 AM
To: "Gordus, Margarita@Wildlife" <margarita.gordus@wildlife.ca.gov>, "Fisher, Austin@Wildlife" <Austin.Fisher@wildlife.ca.gov>

Good Morning Margarita and Austin,

I would like to inform you of a confirmed presence of GGO within the project footprint. The project is the Pine Mountain Lake Fuel Reduction project with CAL FIRE as lead agency.

GGO
A CNDDB search resulted in historic occurrences near the project vicinity. Presence was identified and confirmed with a nest tree identified within the project boundary.

Avoidance measures include:

- **GGO-** ¼ mile no-work buffer will be placed around the nest tree until chicks have fledged with an additional 15-day monitoring period to ensure that final fledglings are not active on or near the ground. This will be monitored by an RPF or RPF designee familiar with species identification and life history. Within the ¼ mile distance from the nest, lower limbs will be left to provide residual habitat characteristics to facilitate fledgling habitat. Due to there being a confirmed active great gray owl nest within the project, any potential great gray owl nesting habitat within the project where the species could be impacted shall be surveyed by a qualified RPF, RPF supervised designee, or biologist during the survey period, prior to operations, each year that operations may occur within the critical period. It is not possible to properly survey within ¼ mile of the project boundary due to the restraints of private land ownership. Unless the trees pose a hazard to the public or project workers the project will retain nesting habitat, large live or dead trees with defects or decaying wood and cavities.

The project is time sensitive and we respectfully request a quick turnaround.

--
Thank You,

Justin Walker
Forestry Technician

California Reforestation
Office (209) 586-2115
22230-A So. Colorado River Dr.
Sonora, CA 95370

Gordus, Margarita@Wildlife <Margarita.Gordus@wildlife.ca.gov> Thu, Nov 2, 2023 at 2:47 PM
To: Justin Walker <justin@calreforest.com>
Cc: "Fisher, Austin@Wildlife" <Austin.Fisher@wildlife.ca.gov>

Hi Mr. Walker,

Thank you for contacting CDFW about the GGO occurrence. I have several clarification questions that will assist me with this species consultation.

Regarding the current occurrence, can you please provide a map of the GGO occurrence in relation to the project boundary? When was the GGO nest detected? Were surveys conducted? If so, what protocol was used?

Regarding the proposed projection measures, what does a “no-work buffer” encompass? Is the intent the equivalent to a no-disturbance buffer? If so, the preference would be to use the term “no-disturbance buffer” to clarify no disturbances of any kind would occur within ¼ mile of the nest site. If the buffer is not a no-disturbance buffer, what project activities will occur within this area? For example, will vehicle traffic associated with the Project occur within the ¼ mile buffer? If so, where would vehicle traffic occur in relation to the nest site? What other potential disturbance activities (e.g. noise, vibration, movement of workers or equipment) may occur within ¼ mile of the occurrence? What is the time period when the buffer will be in place?

Regarding GGO fledglings, if fledglings are still reliant on the nest and/or parental care for survival there is concern that if the buffer is lifted there could be potential impacts to the species. If the fledglings have not been confirmed to have dispersed from the nest stand, will a qualified biologist conduct continuous monitoring of the nest site to determine if project activities are causing GGO behavioral changes? If continuous monitoring will occur, how will a behavior baselines be established? If behavioral changes are detected will project activities stop and will CDFW be contacted?

Regarding future GGO surveys, what survey protocol will be used? If alterations to an established survey protocol are proposed, what are those survey alterations?

Regarding nesting habitat retention, what areas of the project area will be managed to maintain and/or enhance GGO habitat? Would only tree limbing occur within ¼ mile of the known nest site? How will other potential GGO habitat be treated? A great recourse on managing forest habitat for GGO is A Conservation Strategy for Great Gray Owls (Strix nebulosa) in California (link here, landing page https://birdpop.org/pages/greatGrayOwlResearch.php)

If you would like to schedule a time to discuss the above questions, please let me know your availability for next week. Currently, I am available on Tuesday from 1-2, 3-5; Wednesday from 2-5, and Thursday 11-4.

Margarita Gordus

CDFW

(559) 207-6681

Value Science. Value Scientists!

From: Justin Walker <justin@calreforest.com>
Sent: Thursday, November 2, 2023 8:14 AM
To: Gordus, Margarita@Wildlife <Margarita.Gordus@wildlife.ca.gov>; Fisher, Austin@Wildlife <Austin.Fisher@Wildlife.ca.gov>
Subject: Pine Mountain Lake Fuel Reduction Project

attachments.

[Quoted text hidden]

CALIFORNIA REFORESTATION INC.

Justin Walker <justin@calreforest.com> Thu, Nov 2, 2023 at 3:50 PM
To: "Petersen, Caroline@CALFIRE" <caroline.petersen@fire.ca.gov>

Caroline,

Attached are my responses to CDFW GGO notification. Please advise.
[Quoted text hidden]

2 attachments

CDFW GGO.docx
18K

GGO Observations Map.pdf
3965K

Petersen, Caroline@CALFIRE <caroline.petersen@fire.ca.gov> Fri, Nov 3, 2023 at 9:20 AM
To: Justin Walker <justin@calreforest.com>

Justin,

See attached. Are you free for a phone call?

From: Justin Walker <justin@calreforest.com>
Sent: Thursday, November 2, 2023 3:51 PM
To: Petersen, Caroline@CALFIRE <caroline.petersen@fire.ca.gov>
Subject: Fwd: Pine Mountain Lake Fuel Reduction Project

Warning: this message is from an external user and should be treated with caution.

[Quoted text hidden]

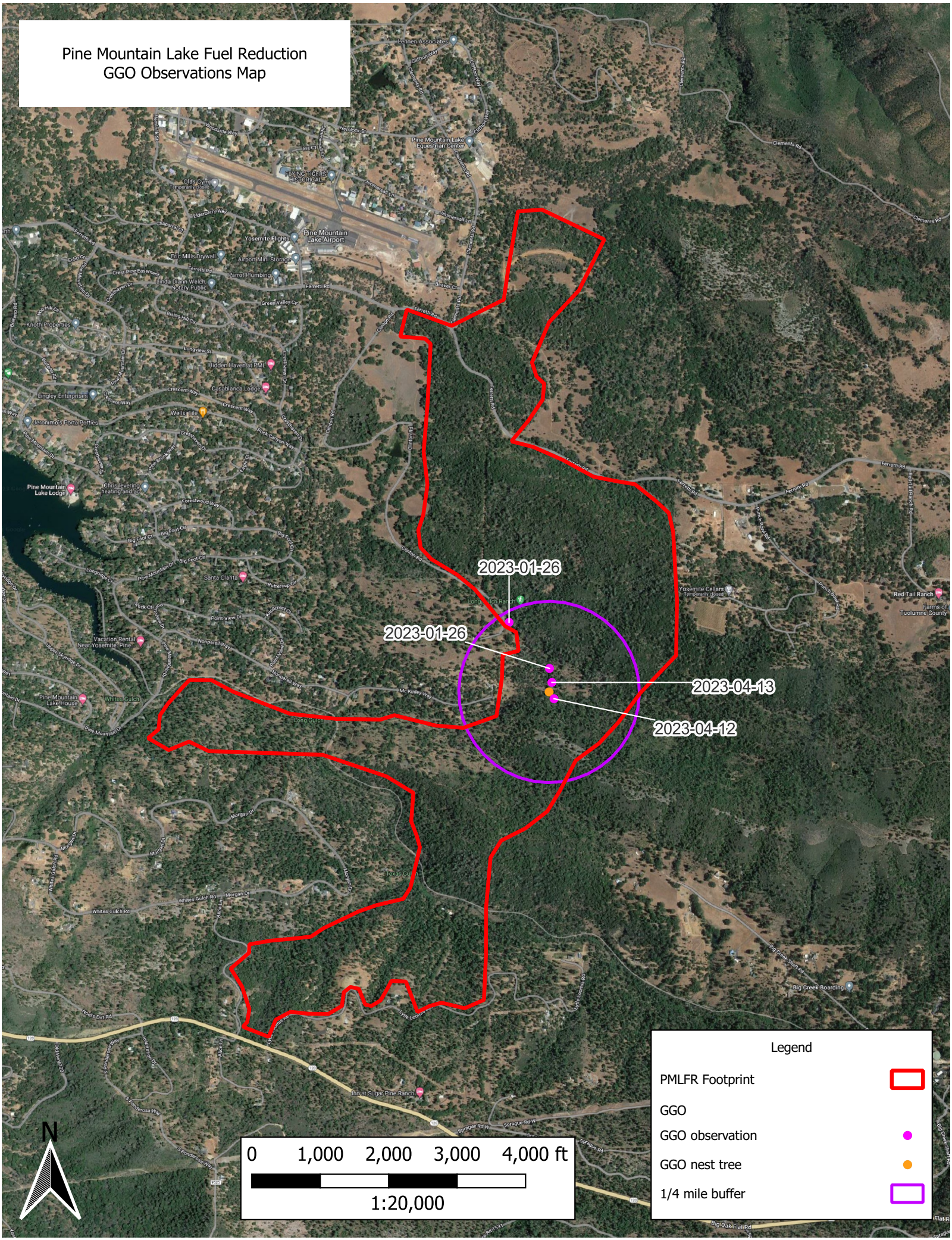
CALIFORNIA REFORESTATION INC.

CDFW GGO_CP.docx
23K

Justin Walker <justin@calreforest.com> Fri, Nov 3, 2023 at 9:21 AM
To: "Petersen, Caroline@CALFIRE" <caroline.petersen@fire.ca.gov>

Thank you,

Any time.


Pine Mountain Lake Fuel Reduction
GGO Observations Map
2023-01-26
2023-01-26
2023-04-13
2023-04-12
Legend
PMLFR Footprint
GGO
GGO observation
GGO nest tree
1/4 mile buffer
N
0
1,000
2,000
3,000
4,000 ft
1:20,000

[Quoted text hidden]

Justin Walker <justin@calreforest.com> Fri, Nov 3, 2023 at 12:04 PM
To: "Gordus, Margarita@Wildlife" <Margarita.Gordus@wildlife.ca.gov>
Cc: "Fisher, Austin@Wildlife" <Austin.Fisher@wildlife.ca.gov>

Margara,

Please see responses to your questions below, as well as the attached map.

1. Regarding the current occurrence, can you please provide a map of the GGO occurrence in relation to the project boundary? When was the GGO nest detected? Were surveys conducted? If so, what protocol was used?

- January 26, 2023- Initial site visit to the project resulted in positive confirmation of GGO presence located off Clinton Rd. entrance to Long Gulch Ranch near the large Oak Tree. Subsequent investigations for the nest resulted in a negative finding. Previously recorded nest site region (CNDDB Record) resulted in a negative finding.
- January 30, 2023 Morning survey in vicinity of owl observation hooted for owl, no response.
- January 31, 2023- Morning survey in vicinity of owl observation hooted for owl, no response.
- February 1, 2023- Called owl in meadow on Clinton Rd. at approximately 5:30- 6:00 faint response.
- February 24 2023- Morning survey in vicinity of owl observation hooted for owl, no response.
- April 6, 2023- GGO night survey, no results
- April 12- GGO sighted during Archaeological survey, nest found.
- April 13- GGO nest confirmed
- May 9- GGO nest monitor- no activity
- May 26- GGO nest monitor- no activity

Surveys were abandoned when the nest was found and confirmed.

The "SURVEY PROTOCOL FOR THE GREAT GRAY OWL IN THE SIERRA NEVADA OF CALIFORNIA" by Thomas W. Beck and Jon Winter from 2000 was used.

2. **Regarding the proposed projection measures, what does a "no-work buffer" encompass? Is the intent the equivalent to a no-disturbance buffer? If so, the preference would be to use the term "no-disturbance buffer" to clarify no disturbances of any kind would occur within ¼ mile of the nest site. If the buffer is not a no-disturbance buffer, what project activities will occur within this area? For example, will vehicle traffic associated with the Project occur within the ¼ mile buffer? If so, where would vehicle traffic occur in relation to the nest site? What other potential disturbance activities (e.g. noise, vibration, movement of workers or equipment) may occur within ¼ mile of the occurrence? What is the time period when the buffer will be in place?**

No-work buffer will be changed to No-disturbance buffer.

- Avoidance Measures: ¼ mile no-work buffer will be placed around the nest tree until chicks have fledged with an additional 15-day monitoring period to ensure that final fledglings are not active on or near the ground. This will be monitored by an RPF or RPF designee familiar with species identification and life history. Within the ¼ mile distance from the nest, lower limbs will be left to provide residual habitat characteristics to facilitate fledgling habitat. Due to there being a confirmed active great gray owl nest within the project, any potential great gray owl nesting habitat within the project where the species could be impacted shall be surveyed by a qualified RPF, RPF supervised designee, or biologist during the survey period, prior to operations, each year that operations may occur within the critical period. It is not possible to properly survey within ¼ mile of the project boundary due to the restraints of private land ownership. Unless the trees pose a hazard to the public or project workers the project will retain nesting habitat, large live or dead trees with defects or decaying wood and cavities.

3. Regarding GGO fledglings, if fledglings are still reliant on the nest and/or parental care for survival there is concern that if the buffer is lifted there could be potential impacts to the species. If the fledglings have not been confirmed to have dispersed from the nest stand, will a qualified biologist conduct continuous monitoring of the nest site to determine if project activities are causing GGO behavioral changes? If continuous monitoring will occur, how will a behavior baselines be established? If behavioral changes are detected will project activities stop and will CDFW be contacted?

Nest will be monitored for 15 days after chicks have fledged. Operations will not commence until fledglings have been determined to have left the nest and/or be reliant on the nest and/or parental care for survival.

4. Regarding future GGO surveys, what survey protocol will be used? If alterations to an established survey protocol are proposed, what are those survey alterations?

The "SURVEY PROTOCOL FOR THE GREAT GRAY OWL IN THE SIERRA NEVADA OF CALIFORNIA" by Thomas W. Beck and Jon Winter from 2000 will be used. One full nesting season of survey has been completed as per the Beck and Winter 2000 protocol.

5. Regarding nesting habitat retention, what areas of the project area will be managed to maintain and/or enhance GGO habitat? Would only tree limbing occur within ¼ mile of the known nest site? How will other potential GGO habitat be treated? A great recourse on managing forest habitat for GGO is A Conservation Strategy for Great Gray Owls (Strix nebulosa) in California (link here, landing page https://birdpop.org/pages/greatGrayOwlResearch.php)

- Within the ¼ mile distance from the nest, lower limbs will be left to provide residual habitat characteristics to facilitate fledgling habitat.
- Large diameter trees will not be targeted for removal. Large snags will only be targeted if they pose a health and safety hazard for workers. Large snag removal shall need approval by RPF or supervised designee.
- Canopy cover will be maintained. Vegetation treatment is targeted at understory vegetation removal. Smaller trees (less than 10") with good vigor will be retained where they meet spacing requirements.

Project will complete brush thinning, pruning and enhancing recruitment of oaks.
[Quoted text hidden]

GGO Observations Map.pdf
3965K

Gordus, Margarita@Wildlife <Margarita.Gordus@wildlife.ca.gov> Thu, Nov 9, 2023 at 2:47 PM
To: Justin Walker <justin@calreforest.com>
Cc: "Fisher, Austin@Wildlife" <Austin.Fisher@wildlife.ca.gov>

Hi Mr. Walker,

Thank you for providing the additional information and clarification below. As a follow up question, will these updated mitigation measures as described below (i.e. no-disturbance buffer, when buffer would be lifted, survey requirements, and habitat retention) be incorporated in the CEQA document for this project?

[Quoted text hidden]
[Quoted text hidden]

CALIFORNIA REFORESTATION INC.

Justin Walker <justin@calreforest.com> Fri, Nov 10, 2023 at 11:28 AM
To: "Gordus, Margarita@Wildlife" <Margarita.Gordus@wildlife.ca.gov>
Cc: "Fisher, Austin@Wildlife" <Austin.Fisher@wildlife.ca.gov>

Margarita,

Yes, they will be incorporated into the CEQA documentation.

CALIFORNIA REFORESTATION

Justin Walker <justin@calreforest.com>

Pine Mountain Lake Fuel Reduction Project

8 messages

Justin Walker <justin@calreforest.com> Thu, Nov 2, 2023 at 8:21 AM
To: "Kuyper, Richard" <richard_kuyper@fws.gov>

Good Morning Richard,

I would like to notify you of the Pine Mountain Lake Fuel Reduction project . CAL FIRE is acting as the lead agency for this project.

This project will use a variety of methods to reduce fuel loading and remove ladder fuels on a highly dense, approximately 640-acre Wildland Urban Interface (WUI) east of Pine Mountain Lake.

Phase I:
Manual or mechanical tree felling of dead/ hazard trees with a felling crew with chain saw or tracked style feller buncher to establish a safe work environment. Brush, ladder fuels, suppressed trees will be targeted for removal with a goal of retaining diverse species, and stand structure. Ideal spacing in the treated landscape will be variable and dependent on vegetation density. Generally, 10–40-foot crown spacing with mottled pockets of brush or untreated vegetation to facilitate wildlife cover. The primary treatment method for this will be mastication using tracked style, excavators or skid-steer.

Phase II:
Hand crews utilizing chainsaws, and pole pruners will prune trees ½ the height of the crown or 8-10 feet whichever is less. This treatment will target areas either too steep, rocky, or sensitive for mechanical treatment. Slash will either be broadcast chipped, or lopped and scattered.

Phase III:
Slash disposal (if required) will be done with tracked or rubber-tired mastication. Areas where machinery is unable to access or is excluded from, slash disposal will be done by hand using lop and scatter.

Phase IV:
Herbivory will be used to browse the regenerating vegetation.

This notification is to inform you of the proposed project, and provide you with an opportunity to comment on the project. If you have any information regarding resources within the proposed project area, or if you have any questions regarding the proposed project, please contact me within 30 days.
Attached is a location and project map

The project is time sensitive and we respectfully request a quick turnaround.

--
Thank You,

Justin Walker
Forestry Technician

California Reforestation
Office (209) 586-2115
22230-A So. Colorado River Dr.
Sonora, CA 95370

2 attachments

Vicinity Map.pdf
304K

Project Map 1-18000.pdf
4741K

Kuyper, Richard <richard_kuyper@fws.gov> Thu, Nov 2, 2023 at 9:55 AM
To: "justin@calreforest.com" <justin@calreforest.com>

Your message

To: Kuyper, Richard
Subject: [EXTERNAL] Pine Mountain Lake Fuel Reduction Project
Sent: Thursday, November 2, 2023 8:21:04 AM (UTC-08:00) Pacific Time (US & Canada)

was read on Thursday, November 2, 2023 9:54:47 AM (UTC-08:00) Pacific Time (US & Canada).

Vogel, Ian M <ian_vogel@fws.gov> Thu, Nov 2, 2023 at 11:02 AM
To: "justin@calreforest.com" <justin@calreforest.com>

Hi Justin,

My supervisor, Rick Kuyper, passed your email on to me. I'll start looking into the project and will provide comments soon. In the meantime, can you please let me know who from CalFire is the main contact for the project?

Thank you,
Ian

--
Ian Vogel (he/him)
Senior Fish and Wildlife Biologist
Southern Sierra Division
Sacramento Fish and Wildlife Office
U.S. Fish and Wildlife Service
(916) 414-6444

From: Justin Walker <justin@calreforest.com>
Sent: Thursday, November 2, 2023 8:21 AM
To: Kuyper, Richard <richard_kuyper@fws.gov>
Subject: [EXTERNAL] Pine Mountain Lake Fuel Reduction Project

[Quoted text hidden]

CALIFORNIA REFORESTATION INC.

Justin Walker <justin@calreforest.com> Thu, Nov 2, 2023 at 12:41 PM
To: "Vogel, Ian M" <ian_vogel@fws.gov>
Cc: "Petersen, Caroline@CALFIRE" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>

Ian,

The project manager for the project is Gary Whitson, and the environmental biologist is Caroline Peterson. I CC'd them on this email.
[Quoted text hidden]

Vogel, Ian M <ian_vogel@fws.gov> Mon, Nov 13, 2023 at 8:30 AM
To: Justin Walker <justin@calreforest.com>
Cc: "caroline.petersen" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>

Hi Justin,

Is there an Initial Study/Mitigated Negative Declaration or similar document that provides more project information including species-specific measures?

Thanks,
Ian

--
Ian Vogel (he/him)
Senior Fish and Wildlife Biologist
Southern Sierra Division
Sacramento Fish and Wildlife Office
U.S. Fish and Wildlife Service
(916) 414-6444

From: Justin Walker <justin@calreforest.com>
Sent: Thursday, November 2, 2023 12:41 PM
To: Vogel, Ian M <ian_vogel@fws.gov>
Cc: caroline.petersen <caroline.petersen@fire.ca.gov>; Gary@CALFIRE Whitson <Gary.Whitson@fire.ca.gov>
Subject: Re: [EXTERNAL] Pine Mountain Lake Fuel Reduction Project

[Quoted text hidden]

CALIFORNIA REFORESTATION INC.

Justin Walker <justin@calreforest.com> Mon, Nov 20, 2023 at 10:24 AM
To: "Vogel, Ian M" <ian_vogel@fws.gov>
Cc: "caroline.petersen" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>

Ian,

See attached for biological scoping. Avoidance measures will be incorporated into the IS/MND's Mitigation Measures.
[Quoted text hidden]

CP_AppendixB_BiologicalScoping_V2 (1).docx
48K

Justin Walker <justin@calreforest.com> Mon, Dec 4, 2023 at 2:47 PM
To: "Vogel, Ian M" <ian_vogel@fws.gov>
Cc: "caroline.petersen" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>

Ian,

I am getting ready to submit to CAL FIRE. Do you have anything to add?
[Quoted text hidden]

Vogel, Ian M <ian_vogel@fws.gov> Mon, Dec 4, 2023 at 3:04 PM
To: Justin Walker <justin@calreforest.com>
Cc: "caroline.petersen" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>

Hi Justin,

Apologies for the delay, I'm juggling a lot of projects right now. I started drafting some comments earlier today and am hoping to get those to you by EOD tomorrow.

Thank you for your patience,
Ian

--
Ian Vogel (he/him)
Senior Fish and Wildlife Biologist
Southern Sierra Division
Sacramento Fish and Wildlife Office
U.S. Fish and Wildlife Service
(916) 414-6444

From: Justin Walker <justin@calreforest.com>
Sent: Monday, December 4, 2023 2:47 PM
[Quoted text hidden]

[Quoted text hidden]

CALIFORNIA REFORESTATION

Justin Walker <justin@calreforest.com>

USFWS comments on the Pine Mountain Lake Fuels Reduction Project

Vogel, Ian M <ian_vogel@fws.gov> Wed, Dec 6, 2023 at 9:39 AM
To: Justin Walker <justin@calreforest.com>
Cc: "caroline.petersen" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>, "Kuyper, Richard" <richard_kuyper@fws.gov>

Hi Justin,

Thank you for the opportunity to provide comments on the proposed Pine Mountain Lake Fuels Reduction Project. Sorry for the delay in getting this to you.

For foothill yellow-legged frog, the biological scoping document stated that a 300-foot no work zone will be established around all suitable habitat if frogs are found in or near the project area. The avoidance measures do not propose pre-construction surveys, so it's unlikely that frogs, if present, would be incidentally detected. Therefore, a protective buffer should apply to suitable habitat whether frogs are incidentally observed or not. However, a 300' buffer may be more protective than necessary. A 100' equipment exclusion buffer around suitable habitat would be appropriate and hand treatments would be allowable within this buffer. However, please coordinate with CDFW as they may have different requirements for avoiding effects to FYLF.

For California spotted owl, the proposed avoidance measures include: "Unless the nest tree(s) pose a hazard to the public or project workers the project will retain nesting habitat, large live or dead trees with defects, or decaying wood and cavities." This wording is confusing and seems like a mix of a couple different measures. For improved clarity and efficacy of the measure, I recommend replacing that sentence with: "Suitable nest trees (i.e., large live or dead trees with defects, decaying wood, or cavities) will not be removed unless it poses a hazard to the public or project workers. The project will retain nesting habitat (e.g., multistoried or complex structure, high canopy cover, large amounts of coarse woody debris)."

The biological scoping document did not consider potential effects to the fisher, but modeled reproductive habitat for the fisher occurs in the project area. However, based on monitoring data available to USFWS, we don't believe the fisher occurs within the general vicinity of the project area. Therefore, the species likely isn't a concern for your project.

Finally, the northwestern pond turtle was recently proposed to be listed as a threatened species. The federal status of the species should be corrected in the document.

Thank you,
Ian

--
Ian Vogel (he/him)
Senior Fish and Wildlife Biologist
Southern Sierra Division
Sacramento Fish and Wildlife Office
U.S. Fish and Wildlife Service
(916) 414-6444

CALIFORNIA REFORESTATION

Justin Walker <justin@calreforest.com>

USFWS comments on the Pine Mountain Lake Fuels Reduction Project

Justin Walker <justin@calreforest.com> Mon, Dec 11, 2023 at 3:42 PM
To: "Vogel, Ian M" <ian_vogel@fws.gov>
Cc: "caroline.petersen" <caroline.petersen@fire.ca.gov>, "Gary@CALFIRE Whitson" <Gary.Whitson@fire.ca.gov>, "Kuyper, Richard" <richard_kuyper@fws.gov>

Ian,

Thank you for your response

Preconstruction surveys have been incorporated into the avoidance measures for the FYLF.

Avoidance measures have been updated to the recommended language for the CSF.

Federal status for the WPT has been updated.

[Quoted text hidden]
[Quoted text hidden]

CALIFORNIA REFORESTATION

Justin Walker <justin@calreforest.com>

Pine Mountain Lake Fuel Reduction

Justin Walker <justin@calreforest.com> Thu, Jun 1, 2023 at 4:13 PM
To: "Meurer, Jonathan R.@Waterboards" <Jonathan.Meurer@waterboards.ca.gov>, aaron.rachels@waterboards.ca.gov
Cc: Will Dorrell <will@calreforest.com>

Jonathan and Aaron,

Please find the attached letter notifying the water board of the Pine Mountain Lake Fuel Reduction Project.

--
Thank You,

Justin Walker
Forestry Technician

California Reforestation
Office (209) 586-2115
22230-A So. Colorado River Dr.
Sonora, CA 95370

PMLFR- CVRWQCB Notification Letter.pdf
5141K

CALIFORNIA REFORESTATION, INC.

22230-A So. Colorado River Drive • Sonora, California 95370
(209) 586-2115

June 1, 2023

Central Valley Regional Water Quality Control Board
11020 San Center Drive, #200
Rancho Cordova, CA 95670-6114

To Whom It May Concern,

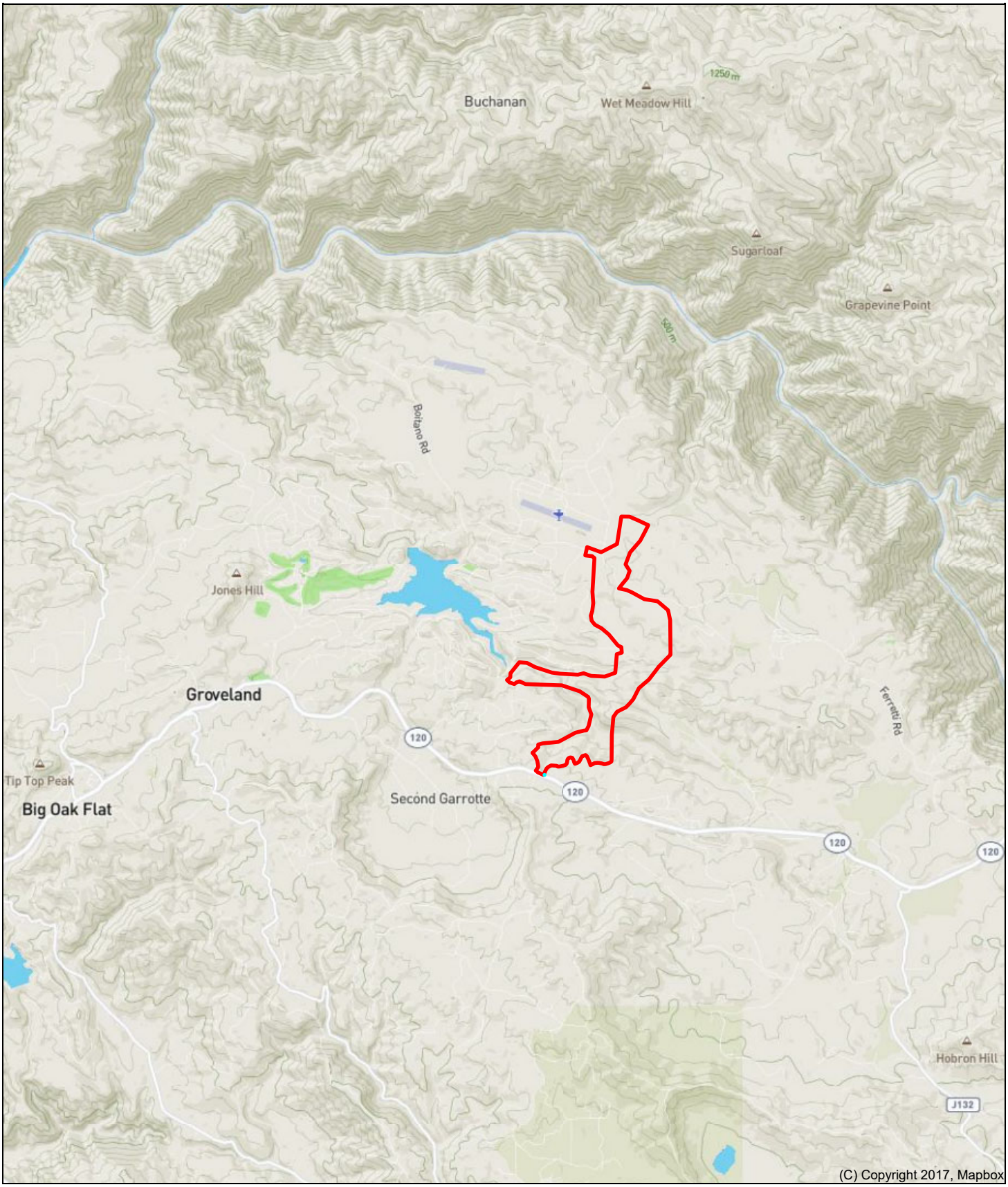
The Tuolumne Count Resource Conservation District (TCRCD) is preparing to conduct the Pine Mountain Lake Fuel Reduction Project. The project is located in the oak woodland/ oak- pine transition belt near Pine Mountain Lake in Tuolumne County. The fuel break is strategically situated East of the densely populated communities of Pine Mountain Lake subdivision and the greater community of Groveland. The fuel reduction project foot print resides on approximately 641 acres spanning approximately 20 parcels of densely vegetated oak, and shrub forest. Proposed project includes Mastication and goat grazing. Small isolated areas within unit may not be accessible to equipment because of either slope or other mechanical deterrent. In these areas, vegetation will be hand cut and lopped. Following or concurrent with mastication a hand crew will prune trees to a minimum height of 10 feet or maximum of ½ the height of the crown whichever is less. Slash created from pruning will be chipped or masticated.

This notification is to inform you of the proposed project, and provide you with an opportunity to comment on the project. If you have any information regarding resources within the proposed project area, or if you have any questions regarding the proposed project, please contact me before July 1, 2023 at the address and telephone number listed above. A project map has been enclosed for your review, thank you for your assistance.

Sincerely,

William Dorrell

RPF #2311



PMLFR Boundary

Declination

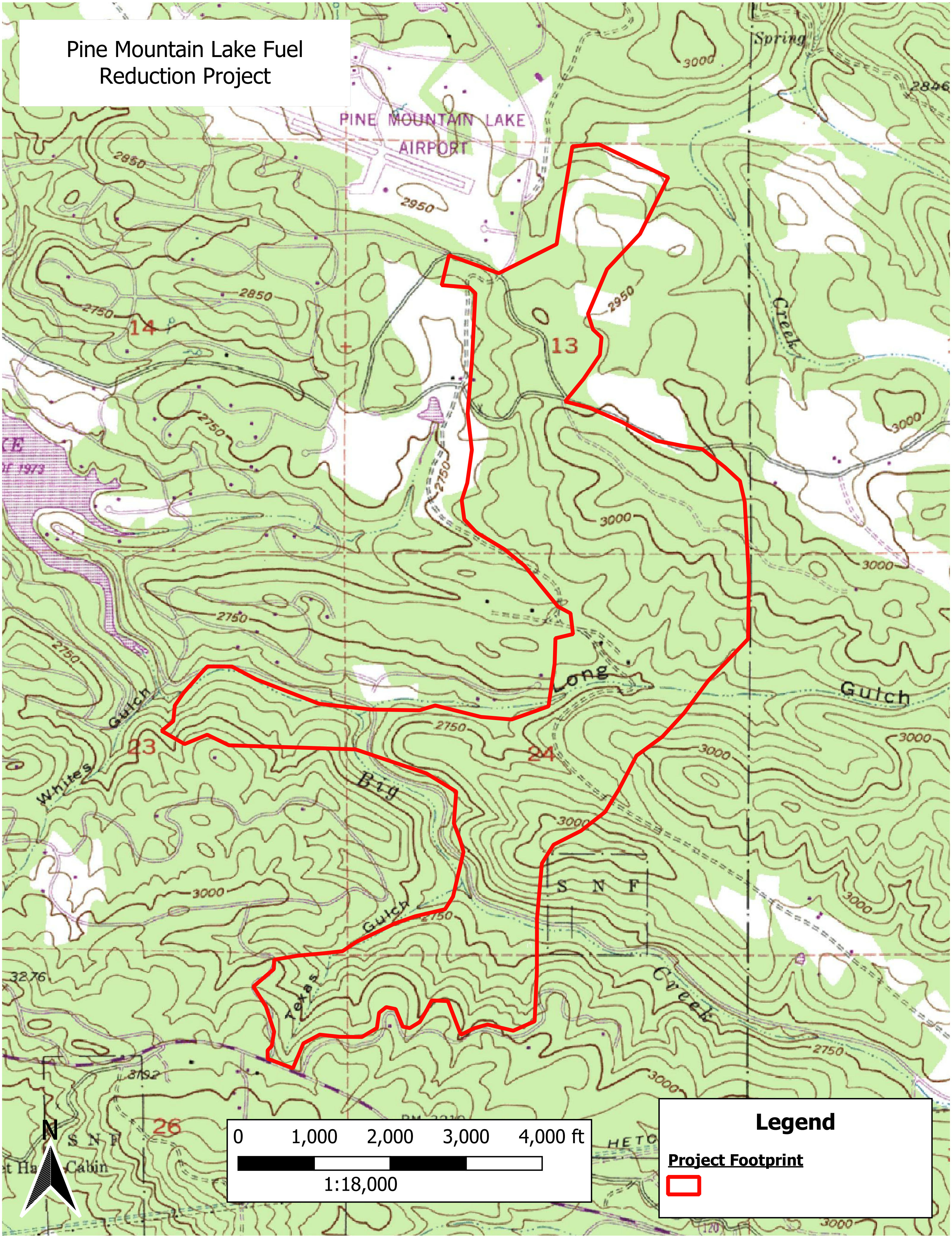
GN 1.72° E
MN 13.03° E

SCALE 1:75000

0 1
Mile

GROVELAND, CA

Pine Mountain Lake Fuel Reduction Project



APPENDIX B- BIOLOGICAL SCOPING

CNDDB: Bios- 3-mile Radius & Rare Find- 9-Quadrangle Search: 10/24/2023
Quads: Groveland, Standard, Tuolumne, Duckwall Mt, Jawbone Ridge, Buckhorn Peak, Coulterville, Penon Blanco Peak, Moccasin

Amphibians

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	Within 3-Miles	Discussion
Rana boylii pop. 5	foothill yellow-legged frog - south Sierra DPS	Endangered	Endangered	None	None	Y	Y	Y
Hydromantes brunus	limestone salamander	None	Threatened	FP	None	N	N	N

Arachnids

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	CNDDB 3-Mile	Discussion
Banksula tuolumne	Tuolumne cave harvestman	None	None	None	None	N	N	N

Birds

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	CNDDB 3-Mile	Discussion
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	None	None	N	N	N
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	FP	S	N	N	Y
Strix nebulosa	great gray owl	None	Endangered	None	S	Y	Y	Y
Falco mexicanus	prairie falcon	None	None	WL	None	N	N	N
Athene cunicularia	burrowing owl	None	None	SSC	None	N	N	N
Strix occidentalis occidentalis	California spotted owl	Proposed Threatened	None	SSC	None	Y	Y	Y

Crustaceans

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	Within 3-Miles	Discussion
Stygobromus harai	Hara's Cave amphipod	None	None	None	None	N	N	N
Stygobromus *wengerorum*	Wengerors' Cave amphipod	None	None	None	None	N	N	N

Fish

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	Within 3-Miles	Discussion
Hesperoleucus symmetricus symmetricus	central California roach	None	None	SSC	None	N	N	N

Insects

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	CNDDB 3-Mile	Discussion
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	Threatened	None	None	None	N	N	N
Bombus crotchii	Crotch bumble bee	None	Candidate Endangered	None	None	N	N	Y

Mammals

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	Within 3-Miles	Discussion
Antrozous pallidus	pallid bat	None	None	SSC	None	N	N	N
Corynorhinus townsendii	Townsend's big-eared bat	None	None	SSC	None	N	Y	Y
Euderma maculatum	spotted bat	None	None	SSC	None	N	N	N
Eumops perotis californicus	western mastiff bat	None	None	SSC	None	N	N	N
Lasiurus frantzii	western red bat	None	None	SSC	None	N	N	N
Lasionycteris noctivagans	silver-haired bat	None	None	None	None	N	N	N
Lasiurus cinereus	hoary bat	None	None	None	None	N	N	N
Myotis evotis	long-eared myotis	None	None	None	None	N	N	N
Myotis thysanodes	fringed myotis	None	None	None	None	N	N	N
Myotis volans	long-legged myotis	None	None	None	None	N	N	N
Myotis yumanensis	Yuma myotis	None	None	None	None	N	N	N

Mollusks

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	Within 3-Miles	Discussion
Margaritifera falcata	western pearlshell	None	None	None	None	N	N	N
Monadenia circumcarinata	keeled sideband	None	None	None	None	N	N	N
Monadenia tuolumneana	Tuolumne sideband	None	None	None	None	N	N	N
Monadenia yosemitensis	Yosemite sideband	None	None	None	None	N	N	N

Plants

Scientific Name	Common Name	Federal Status	State Status	CRPR	Habitat in project	Within 3-Miles	Discussion
Packera layneae	Layne's ragwort	Threatened	Rare	1B.2	N	N	N
Allium tuolumnense	Rawhide Hill onion	None	None	1B.2	N	N	N
Balsamorhiza macrolepis	big-scale balsamroot	None	None	1B.2	N	N	N
Camissonia lacustris	grassland suncup	None	None	1B.2	N	N	N
Clarkia australis	Small's southern clarkia	None	None	1B.2	Y	N	Y
Clarkia biloba ssp. australis	Mariposa clarkia	None	None	1B.2	Y	Y	Y
Diplacus pulchellus	yellow-lip pansy monkeyflower	None	None	1B.2	Y	Y	Y
Eryngium pinnatisectum	Tuolumne button-celery	None	None	1B.2	N	N	N

Erythranthe filicaulis	slender-stemmed monkeyflower	None	None	1B.2	Y	Y	Y
Erythronium tuolumnense	Tuolumne fawn lily	None	None	1B.2	Y	Y	Y
Horkelia parryi	Parry's horkelia	None	None	1B.2	N	N	N
Lomatium congdonii	Congdon's lomatium	None	None	1B.2	N	N	N
Lupinus spectabilis	shaggyhair lupine	None	None	1B.2	N	N	N
Navarretia miwukensis	Mi-Wuk navarretia	None	None	1B.2	N	N	N
Senecio clevelandii var. heterophyllus	Red Hills ragwort	None	None	1B.2	N	N	N
Clarkia rostrata	beaked clarkia	None	None	1B.3	N	N	N
Cryptantha mariposae	Mariposa cryptantha	None	None	1B.3	N	N	N
Cryptantha spithamaea	Red Hills cryptantha	None	None	1B.3	N	N	N
Rhynchospora capitellata	brownish beaked-rush	None	None	2B.2	N	N	N
Fritillaria agrestis	stinkbells	None	None	4.2	N	N	N

Reptiles

Scientific Name	Common Name	Federal Status	State Status	CDFW	CDF	Habitat in project	Within 3-Miles	Discussion
Emys marmorata	western pond turtle	Proposed Threatened	None	SSC	None	Y	Y	Y

Discussion:

Amphibians

Rana boylii- foothill yellow-legged frog

- Habitat- Partially shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble sized substrate for laying and at least 15 weeks to attain metamorphosis.
- CNDDB- Found within three-mile radius of project in 4 locations: grapevine creek, Clavey river, Tuolumne River (near grapevine creek), Tuolumne River (near humbug creek).
- Preliminary site survey- Focused visual surveys were conducted on: 1/26/23, 1/30/23, 2/24/23, 4/12/23, 5/9/23, 5/26/23, with no presence found during the surveys. Surveys were conducted by a qualified RPF or supervised designee familiar with species identification and life history.
- Avoidance Measures: If species is found near or in the project area, a 300-foot no work zone will be established around all suitable habitat. A qualified RPF, supervised designee, or biologist familiar with species identification and life history shall survey for amphibians during the survey period, prior to operations, each year that operations may occur. In the case of a detection, the 300' no work zone will extend 300' from the high-water mark of the watercourse. These protection measures will be designated on the ground by the RPF or supervised designee using flagging; the color, meaning and location of the flagging will be communicated to create proper understanding with all operators on the project.

Birds

Haliaeetus leucocephalus- Bald Eagle

- Field Survey: Conducted on 1/30/23, 1/31/23, 2/1/23, 2/24/23 did not result in detection of nests.
- CNDDB: 3-mile radius resulted in no findings.
- Habitat- General habitat includes ocean shore, lake margins, and rivers for both nesting and wintering with most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.
- Presence: None are formally known or identified within or near the project boundary. The southern portion of the project is within 1 mile from Pine Mountain Lake, but no suitable nesting habitat was observed.
- Protection Measure: A general nesting bird survey will be conducted, for work being performed from February 1 to September 15 prior to the start of operations during the appropriate survey window. If an active nest is found, a 0.5 mile no disturbance buffer will be placed on the nest until the chicks have fledged. Unless the trees pose a hazard to the public or project workers the project will retain nesting habitat and large prominent snags (especially ponderosa pine).

Strix nebulosa- Great Gray Owl

- Field survey: Initial site visit (1/24/23) to project confirmed presence of one adult. Continued surveys for owl on: 1/26/23, 1/30/23, 1/31/23, 2/1/23, 2/24/23. Initial night survey on 4/6/23 all with negative results. During botanical survey on 4/12/23, and adult great gray owl (GGO) was sighted, and roost/nest tree was located. On 4/13/23, the roost/nest tree was confirmed.
- CNDDB: Historic occurrence from 1993 records a nest to the east of the project.
- Presence: Occupied nest within project boundary during the 2023 nesting season.
- Avoidance Measures: ¼ mile no-work buffer will be placed around the nest tree until chicks have fledged with an additional 15-day monitoring period to ensure that final fledglings are not active on or near the ground. This will be monitored by a qualified RPF or RPF designee familiar with species identification and life history. Within the ¼ mile distance from the nest, lower limbs will be left to provide residual habitat characteristics to facilitate fledgling habitat. Due to there being a confirmed active great gray owl nest within the project, any potential great gray owl nesting habitat within the project where the species could be impacted shall be surveyed by a qualified RPF, RPF supervised designee, or biologist during the survey period, prior to operations, each year that operations may occur within the critical period. It is not possible to properly survey within ¼ mile of the project boundary due to the restraints of private land ownership. Unless the trees pose a hazard to the public or project workers the project will retain nesting habitat, large live or dead trees with defects or decaying wood and cavities.
- Note: Mastication and fuel reduction will increase forage habitat.

Strix occidentalis- California spotted owl

- Habitat: Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure >40%. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.
- Field Surveys: for owl on: 1/26/23, 1/30/23, 1/31/23, 2/1/23, 2/24/23. Initial night survey on 4/6/23 all with negative results.
- CNDDB: Search resulted in recent (2021) activity center near project as well as 2 sightings of pairs from 1991.
- Presence: recorded observations in CNDDB, no sightings during survey.
- Avoidance Measures: Nesting surveys will occur within the project footprint prior to operations when operations occur during the nesting period (February 1 to September 15). If active nest(s) are found within or adjacent to the project footprint a ¼ mile no operations buffer will be placed on the nest tree until chicks have fledged. Suitable nest trees (i.e., large live or dead trees with

defects, decaying wood, or cavities) will not be removed unless it poses a hazard to the public or project workers. The project will retain nesting habitat (e.g., multistoried or complex structure, high canopy cover, large amounts of coarse woody debris).

- Note: Mastication and fuel reduction will increase forage habitat.

Insects

Bombus crotchii- Crotch bumble bee

- Habitat: Once common and widespread, the species has declined precipitously from central CA to southern B.C., perhaps from disease.
  - According to a CDFW report (California Department of Fish and Wildlife, 2019) Crotches bumble bee construct their nests underground, and often rely on sufficient availability of rodent and other animal burrows as well as ground level tufts of grass, rock piles, cavities of dead trees, or man-made structures to provide potential nesting sites. Plant families most commonly visited in California include: *Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllacae, Asclepiadaceae* and *Boraginaceae* (Thorp, Horning and Dunning, 1983) (Vickruck, J. L., & Richards, M. H., 2017)
  - Pollination ecology that may be found on the project could include: Apples, Cherries, black berries as well as a large variety of wildflowers (Evans E, Thorp R, Jepsen S, Black SH, 2008).
- CNDDB: Element was last seen in 1927 in the vicinity of Oakland Recreation Camp along the middle fork of the Tuolumne River.
  - According to a CDFW report (California Department of Fish and Wildlife, 2019): Stating that the Crotch bumble bee inhabits open grassland and scrub habitats. It was historically common in the Central Valley.
- Presence: none formally known within project boundary or within 3-miles of the project.
- Avoidance Measures: Visual surveys will be conducted during floristic period(s). Surveyors will look for signs of ground nests such as pebbling of earth as well as in abandoned rodent burrows. If found a 25-foot EEZ will be flagged around active nests. A 10-foot no work buffer will be placed surrounding the nest. Manual work with hand tools may be conducted between 10 and 25 feet from the nest. A minimum of 5 pollinator shrubs/trees per acre will be maintained where possible.
- Note: It should be noted that mechanical treatments will increase open ground and wildflower habitat and should increase habitat for pollinators in general.

Mammals

Corynorhinus townsendii- Townsend's big-eared bat

- Habitat: Roosts in the open, hanging from walls and ceilings. Extremely sensitive to human disturbance.
- CNDDB: Found within 3-mile radius, last sighting was in 1997 at the "Ellen Winton Mine" The Ellen Whinton Mine is located on the south bank of the Tuolumne River just east of Big Humbug Creek. (Ellen Winton mine. Western Mining History. n.d.).
- Presence: none formally known within project boundary. Occupied dwellings in the south of the project did not exhibit the potential for roosting sites.
- Avoidance Measures: General biological surveys were completed on the project by RPF supervised designee, no roosting habitat was identified. No presence of species was identified at the time of survey. Project is not expected to impact this species, and no active mitigations are proposed. If species is discovered on the property a 100-foot no work buffer will be placed around the roosting site.

Plants

Clarkia australis- Smalls's southern clarkia

- Habitat: Found on serpentine. Open, rocky sites in conifer forest or oak woodland 910-2075 meters.
- CNDDB: Not mapped within 3 miles of project boundary.
- Was not present during time of field surveys. Other variety of clarkia were found within the project footprint: *Clarkia purpurea, Clarkia dudleyana* and *Clarkia virgata.*
- Presence: None formally known within project boundary, not identified during botanical surveys.
- Avoidance Measures: Botanical surveys were completed during floristic period on the project by RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Clarkia biloba ssp. australis- Mariposa Clarkia

- Habitat: Found on serpentine. Several sites occur in the foothill woodland/riparian ecotone. 120-1480 meters.
- CNDDB: Bios places location inside of project boundary. Occurrence Detail states the exact location is unknown. Mapped by CNDDB around Long Gulch, east of McKinley Way, based on 1995 Michael Brandman Associates Coordinates (accuracy of coordinates unknown), in the NE ¼ of section 24. The only source of information for this site is a 1995 Michael Bradman Associates collection. Field surveys were inconclusive and no *Clarkia biloba ssp. australis* were found within the project area. Other variety of clarkia were found within the project footprint: *Clarkia purpurea, Clarkia dudleyana* and *Clarkia virgata.*
- Presence: Historic record from 1995 within project boundary. Botanical surveys during floristic period did not identify species within project boundary.
- Avoidance Measures: Botanical surveys were completed during floristic period on the project by RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Diplacus pulchellus- yellow-lip pansy monkeyflower

- Habitat: Lower montane coniferous forests, meadows, and seeps. Vernally wet sites. Soils can be clay, volcanic, or granitic. 670-1950 meters.
- CNDDB: There are multiple occurrences within 3-miles of the project they are as follows:
  - Site is 0.5 mile east of Pine Mountain Lake airport near Indian creek.
  - North of highway 120 between Smith Station and Buck Meadows Forest Service station.
- Avoidance measures: Botanical surveys were completed during floristic period on the project by RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Erythranthe filicaulis- slender-stemmed monkey flower

- Habitat: Cismontane woodland, lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest. Within the transition zone of the Sierra Nevada; moist granitic sand and meadow edges; vernally mesic sites. 620-1685 meters.
- CNDDB: There are multiple occurrences within 3-miles of the project they are as follows:

    - 0.1 miles north of highway 120 at a point 0.3-0.4 miles NNW from Smith Station Road.
    - East of Pine Mountain Lake Airport, about 0.7 mile east of springs at the head of Big Humbug Creek.
    - North of Highway 120 between Smith Station and Buck Meadows US Forest Service station.
    - North of the Hetch Hetchy aqueduct, north of Kassabaum meadow, east of Groveland.
- Presence: None formally known within the project area. None were identified from botanical survey during floristic period.
- Avoidance measures: Botanical surveys were completed during floristic period on the project by RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Erythronium tuolumnense- Tuolumne fawn lily

- Habitat- Broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Often on clay soils; on cliffs and near drainages. 485-1405 meters.
- CNDDB: There is one occurrence located along Grapevine Creek east of Sugarloaf, and about 1.5 air miles south of Round Meadow. This occurrence is less than 1 mile from the project boundary. Big Creek flows through the project area.
- Presence: None formally known within the project boundary. None were identified from botanical survey during floristic period.
- Avoidance measures: Botanical surveys were completed during floristic period on the project by RPF or RPF supervised designee. No presence of species was identified at the time of survey. If populations or individuals are detected, a 50-foot no disturbance buffer will be flagged for phases I-III and a temporary fence will be erected at the 50-foot buffer during phase IV of project.

Reptiles

Emys marmorata- western pond turtle (WPT)

- Habitat- A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6000 ft. elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
- CNDDB- There is one occurrence within a 3-mile radius in Big Creek, about 0.7 miles NE of highway 120 at Sprague Road and 3.7 miles SE of Groveland, vicinity of Stanislaus National Forest.
- Presence: None formally known within the project boundary.

- Avoidance measures- Focused visual surveys were completed on the project by a qualified RPF or RPF supervised designee. No presence of species was identified at the time of survey, but it is expected that this species in extant. If populations or individuals are detected, a 50-foot no disturbance buffer will be placed around the WPT nest, if nest cannot be identified a 100 foot no disturbance will be placed along the active watercourse.

Citations:

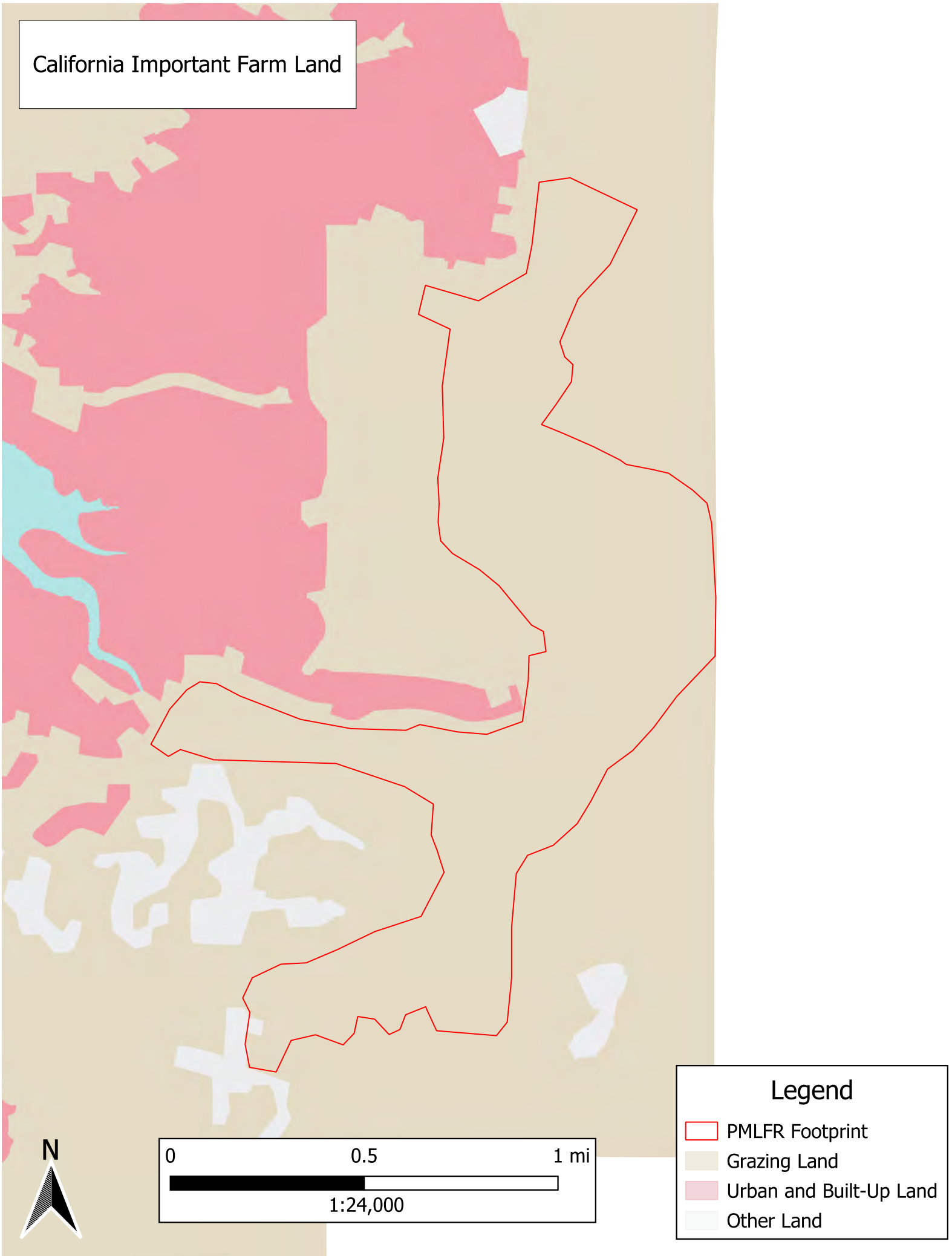
- Vickruck, J. L., & Richards, M. H. (2017). Nesting habits influence population genetic structure of a bee living in anthropogenic disturbance. https://doi.org/10.1111/mec.14064

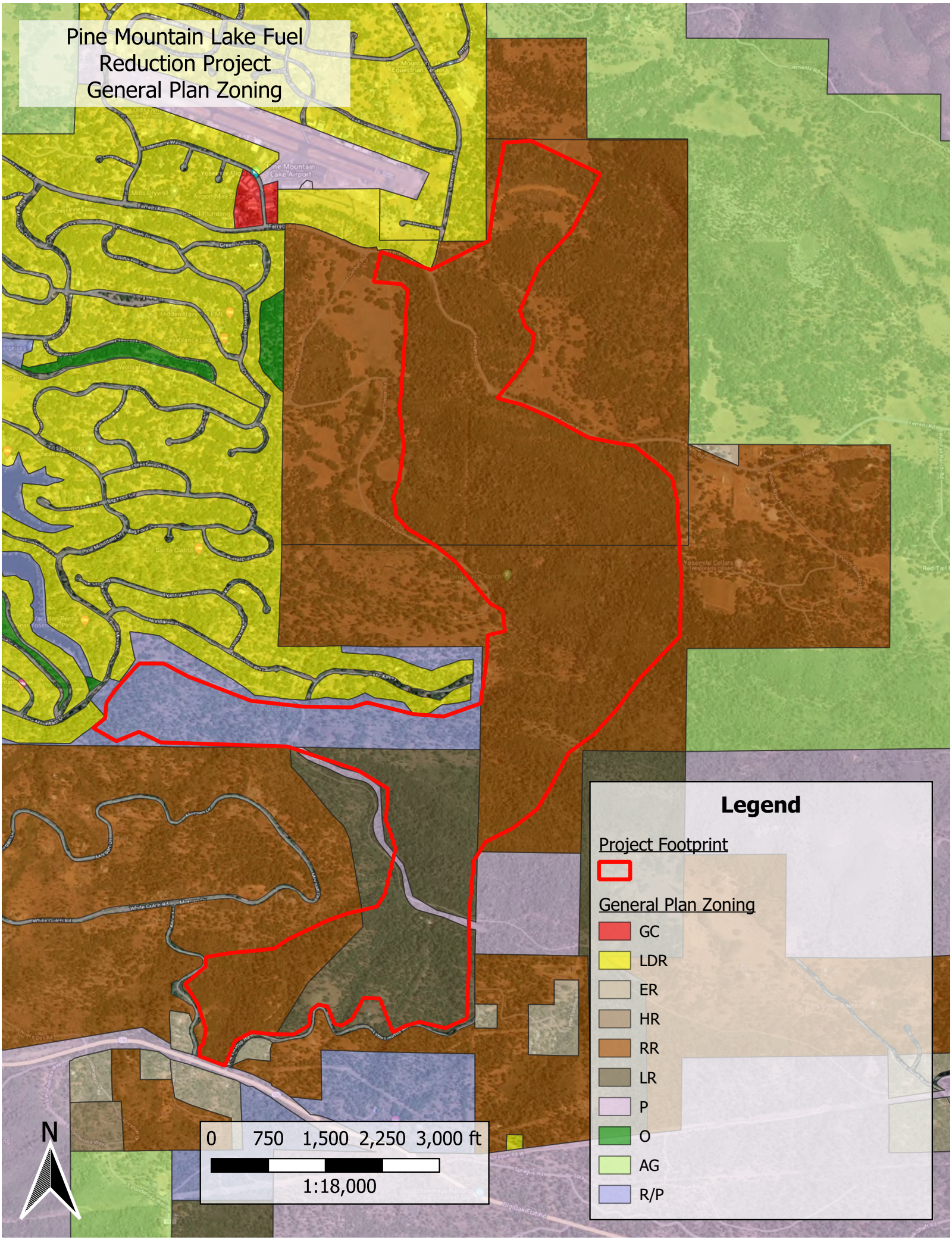
- Thorp, Horning and Dunning (1983) Bumble bees and cuckoo bumble bees of California (Hymenoptera, Apidae) https://api.semanticscholar.org/CorpusID:82933450

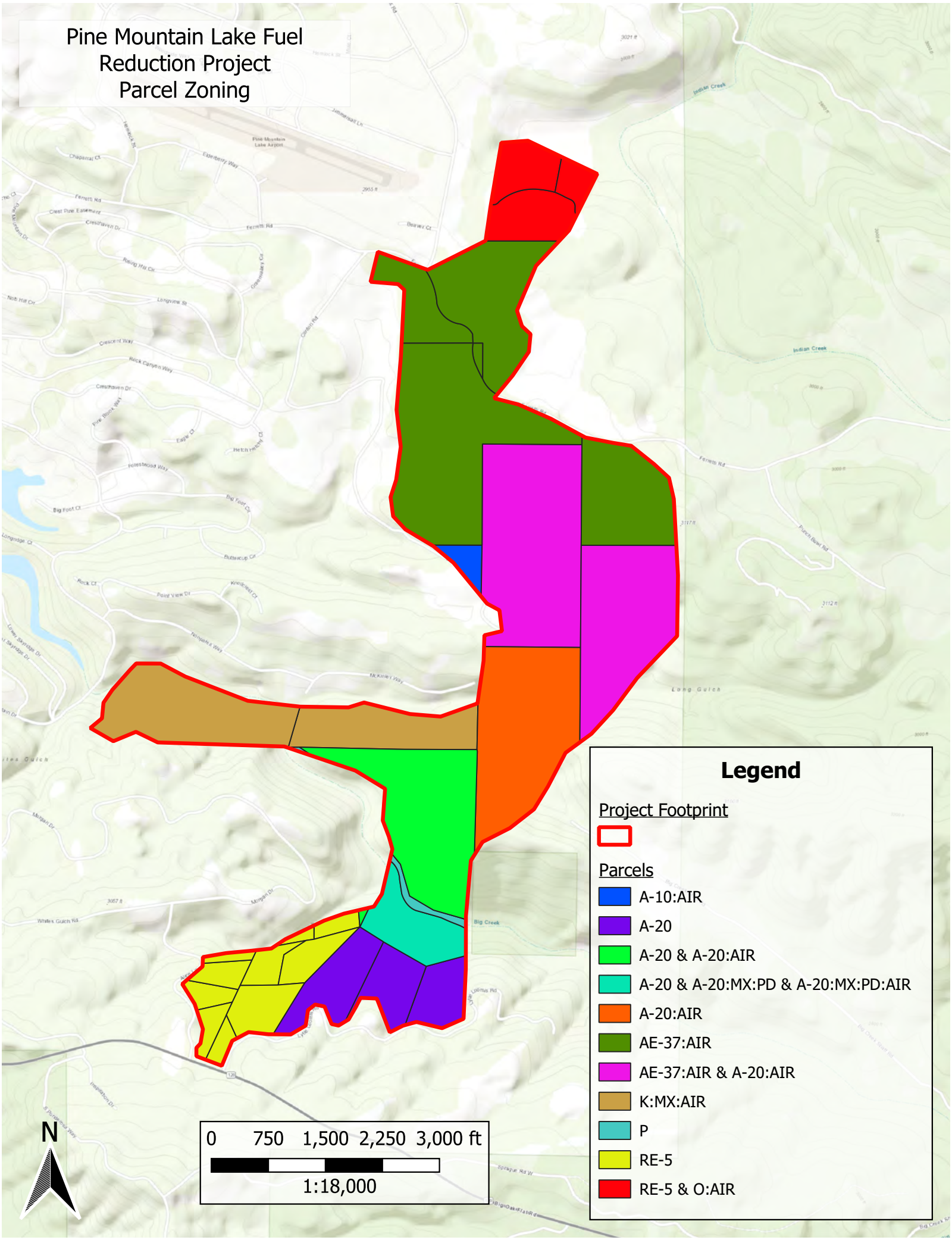
- California Department of Fish and Wildlife (2019). Evaluation of the petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to list four species of bumble bee as endangered under the California endangered species act. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline

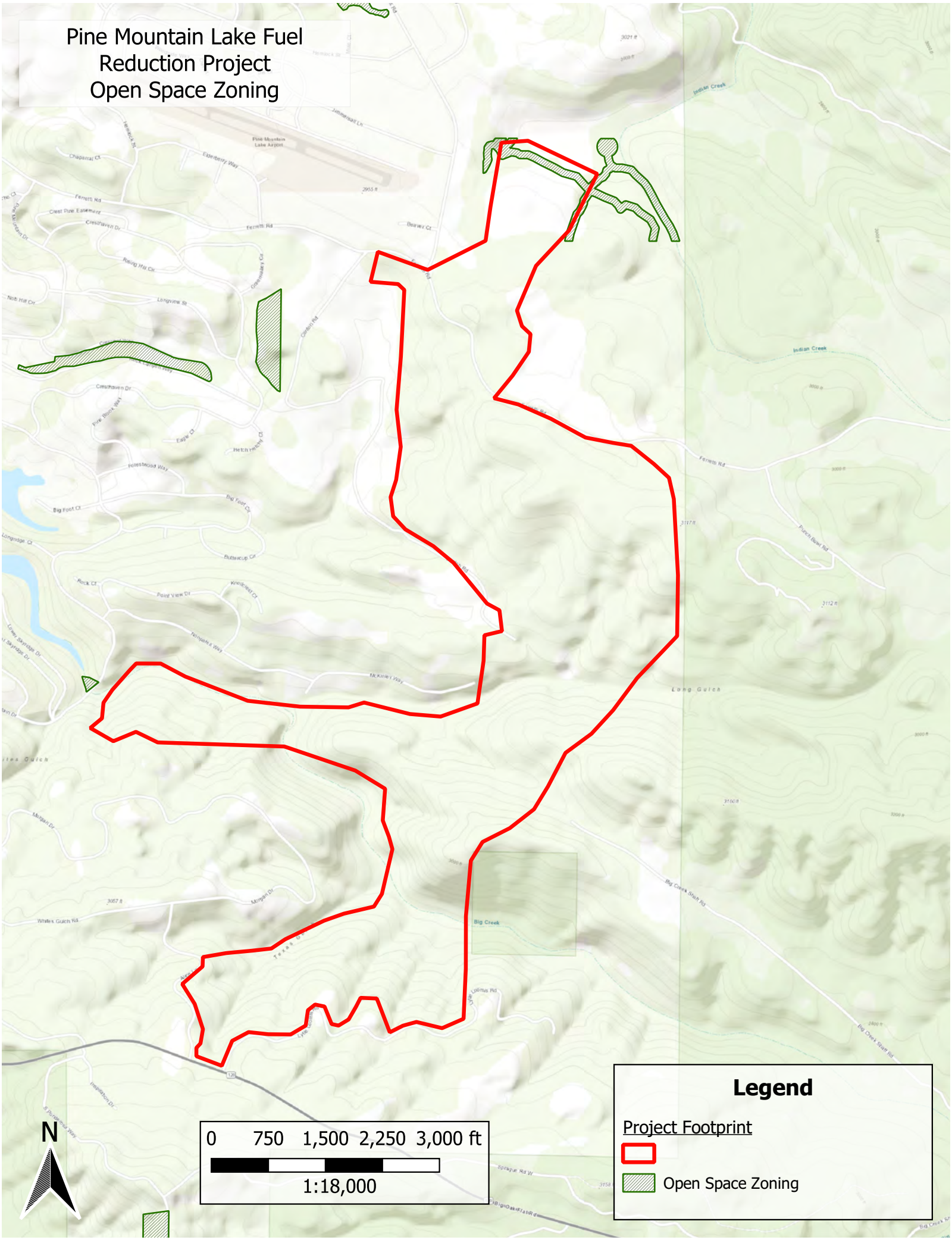
- Evans E, Thorp R, Jepsen S, Black SH. (2008) Status review of three formerly common species of bumble bee in the subgenus Bombus. Xerces Society. https://www.xerces.org/sites/default/files/2019-10/xerces_2008_bombus_status_review.pdf

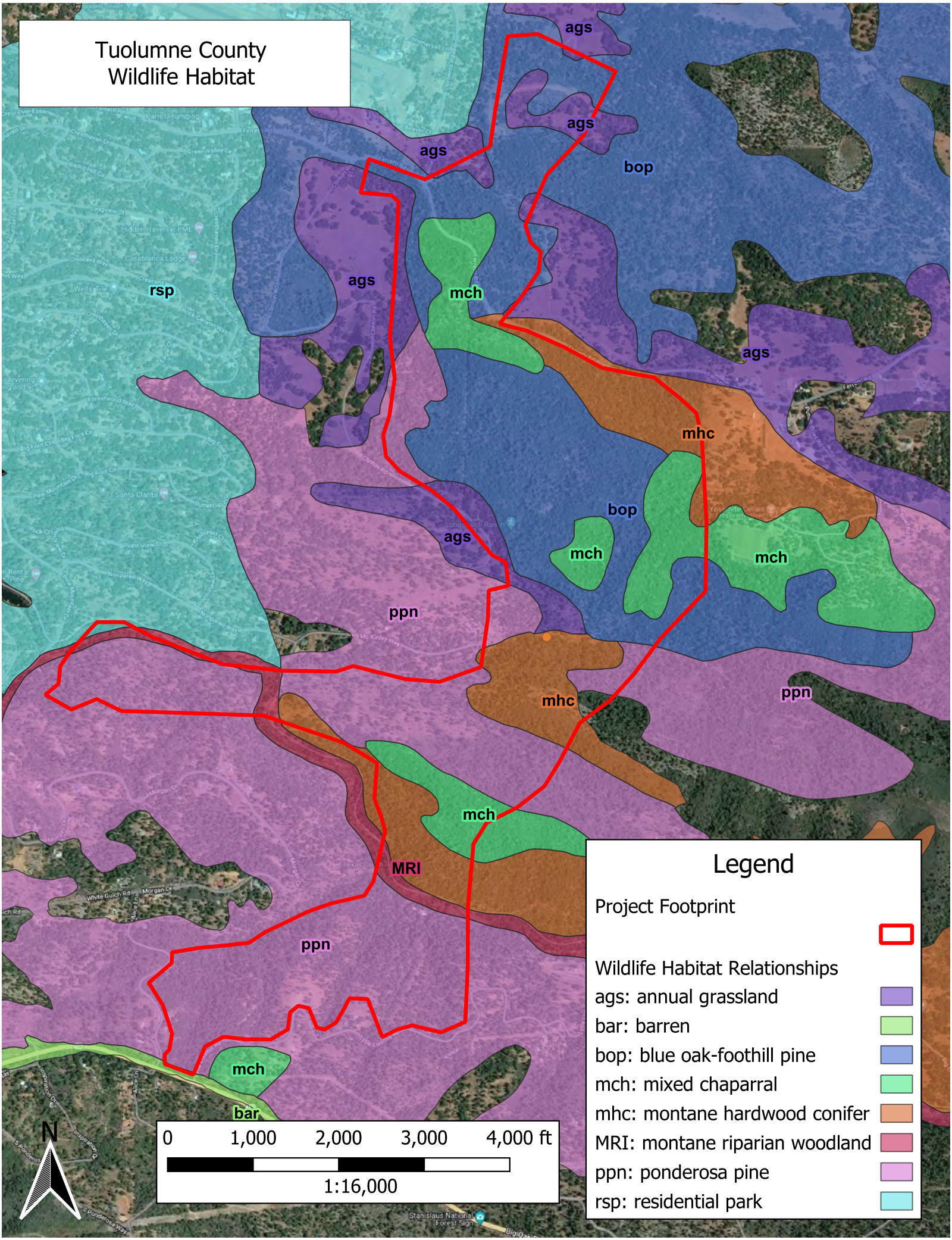
- Ellen Winton mine. Western Mining History. (n.d.). https://westernmininghistory.com/mine-detail/10262786/

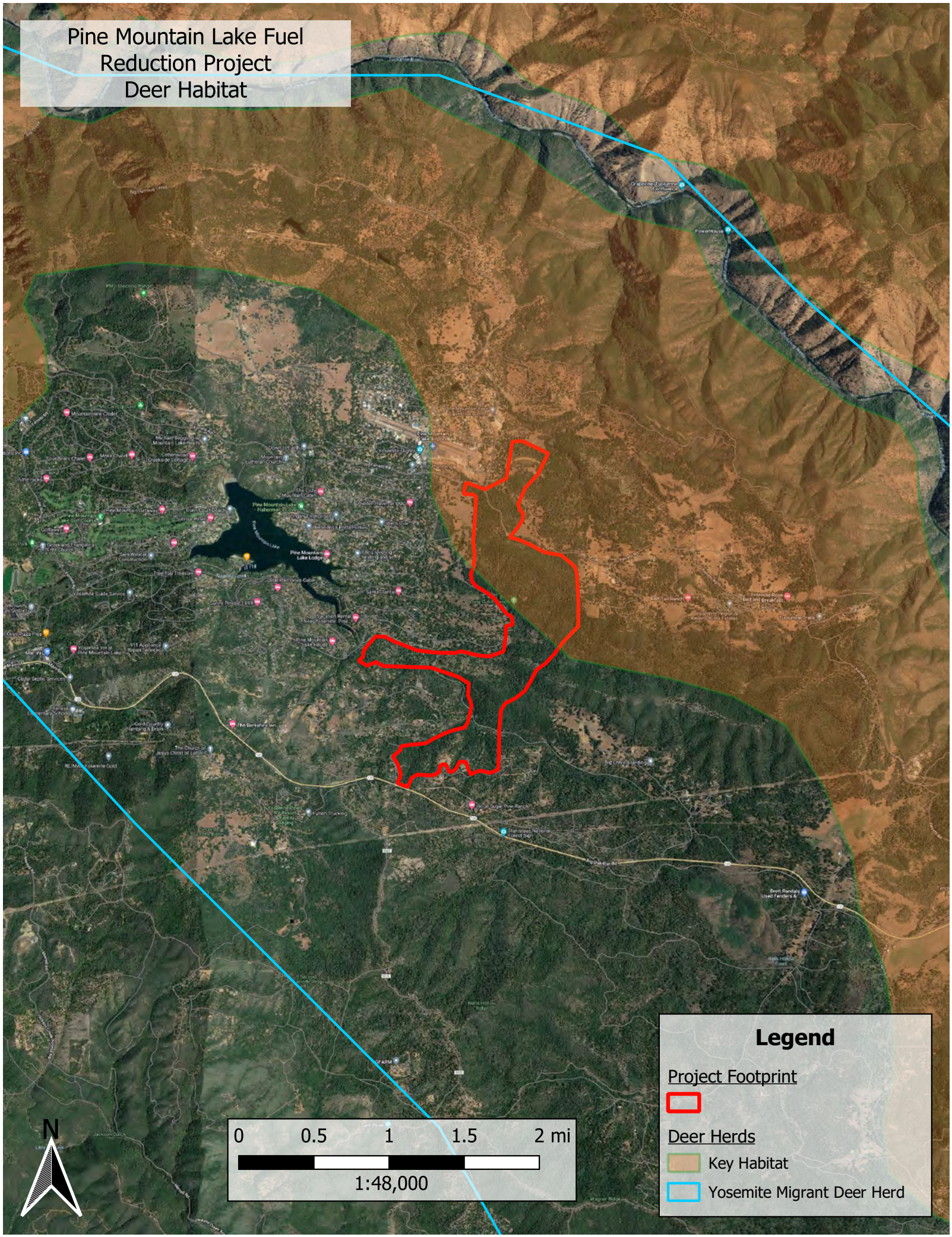

California Important Farm Land
N
0
0.5
1 mi
1:24,000
Legend
PMLFR Footprint
Grazing Land
Urban and Built-Up Land
Other Land


Pine Mountain Lake Fuel Reduction Project General Plan Zoning
Legend
Project Footprint
General Plan Zoning
GC
LDR
ER
HR
RR
LR
P
O
AG
R/P
N
0 750 1,500 2,250 3,000 ft
1:18,000


Pine Mountain Lake Fuel Reduction Project Parcel Zoning
Legend
Project Footprint
Parcels
A-10:AIR
A-20
A-20 & A-20:AIR
A-20 & A-20:MX:PD & A-20:MX:PD:AIR
A-20:AIR
AE-37:AIR
AE-37:AIR & A-20:AIR
K:MX:AIR
P
RE-5
RE-5 & O:AIR
N
0 750 1,500 2,250 3,000 ft
1:18,000

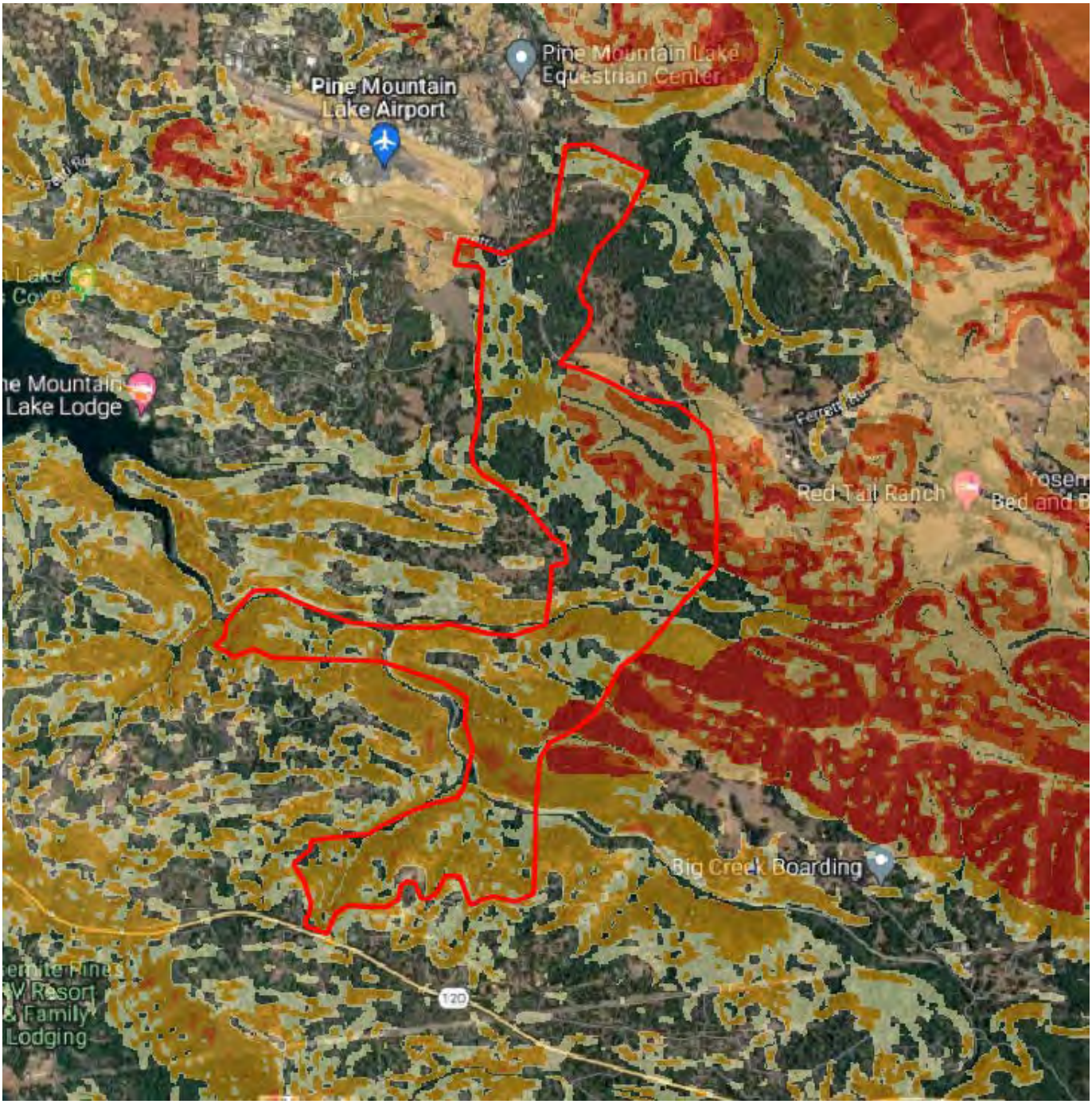

Pine Mountain Lake Fuel
Reduction Project
Open Space Zoning
N
0 750 1,500 2,250 3,000 ft
1:18,000
Legend
Project Footprint
Open Space Zoning

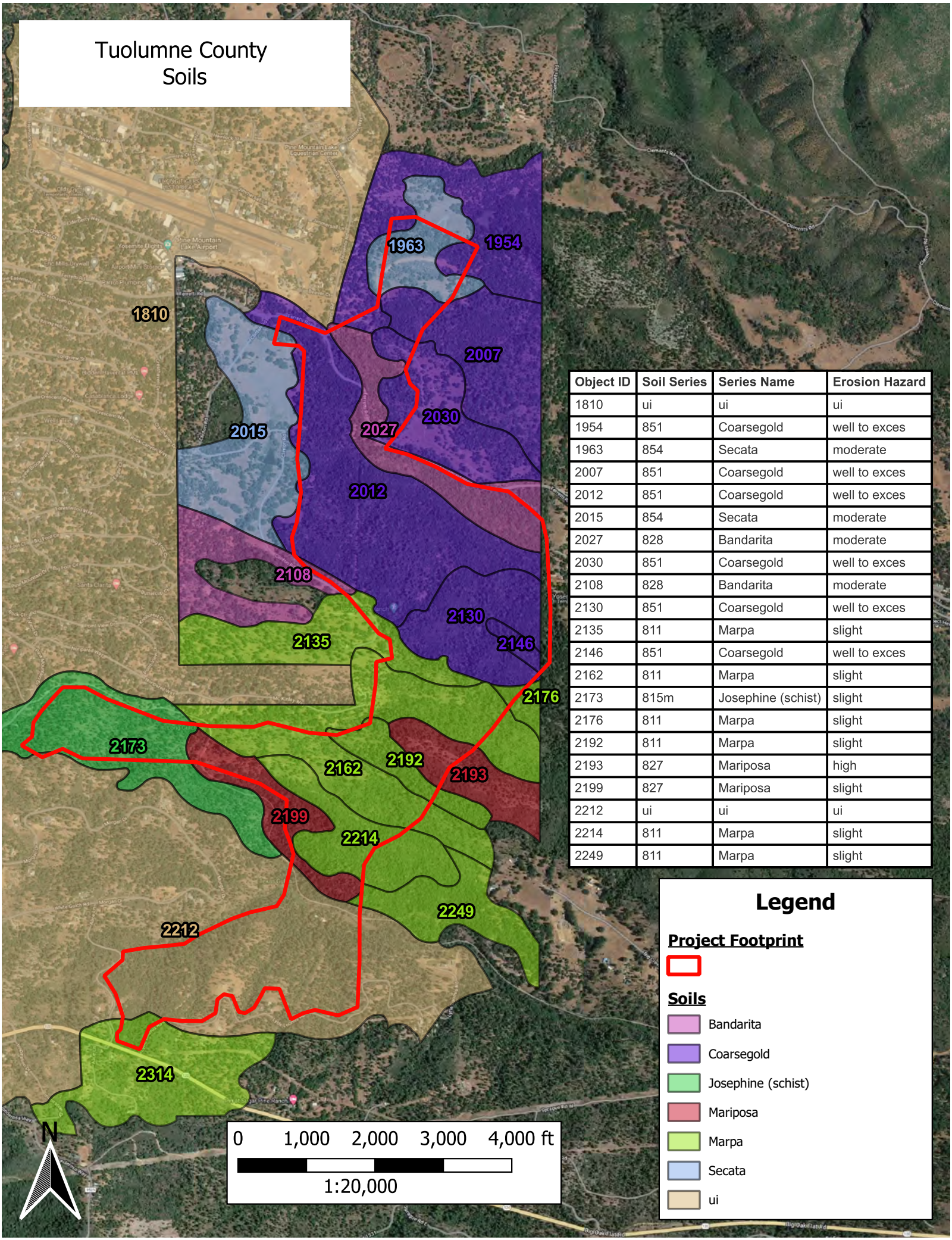

Tuolumne County
Wildlife Habitat
ags
ags
ags
bop
ags
rsp
mch
ags
mhc
bop
ags
mch
mch
ppn
mhc
ppn
mch
MRI
ppn
mch
bar
N
0
1,000
2,000
3,000
4,000 ft
1:16,000
Legend
Project Footprint
Wildlife Habitat Relationships
ags: annual grassland
bar: barren
bop: blue oak-foothill pine
mch: mixed chaparral
mhc: montane hardwood conifer
MRI: montane riparian woodland
ppn: ponderosa pine
rsp: residential park


Pine Mountain Lake Fuel Reduction Project Deer Habitat
N
0
0.5
1
1.5
2 mi
1:48,000
Legend
Project Footprint
Deer Herds
Key Habitat
Yosemite Migrant Deer Herd

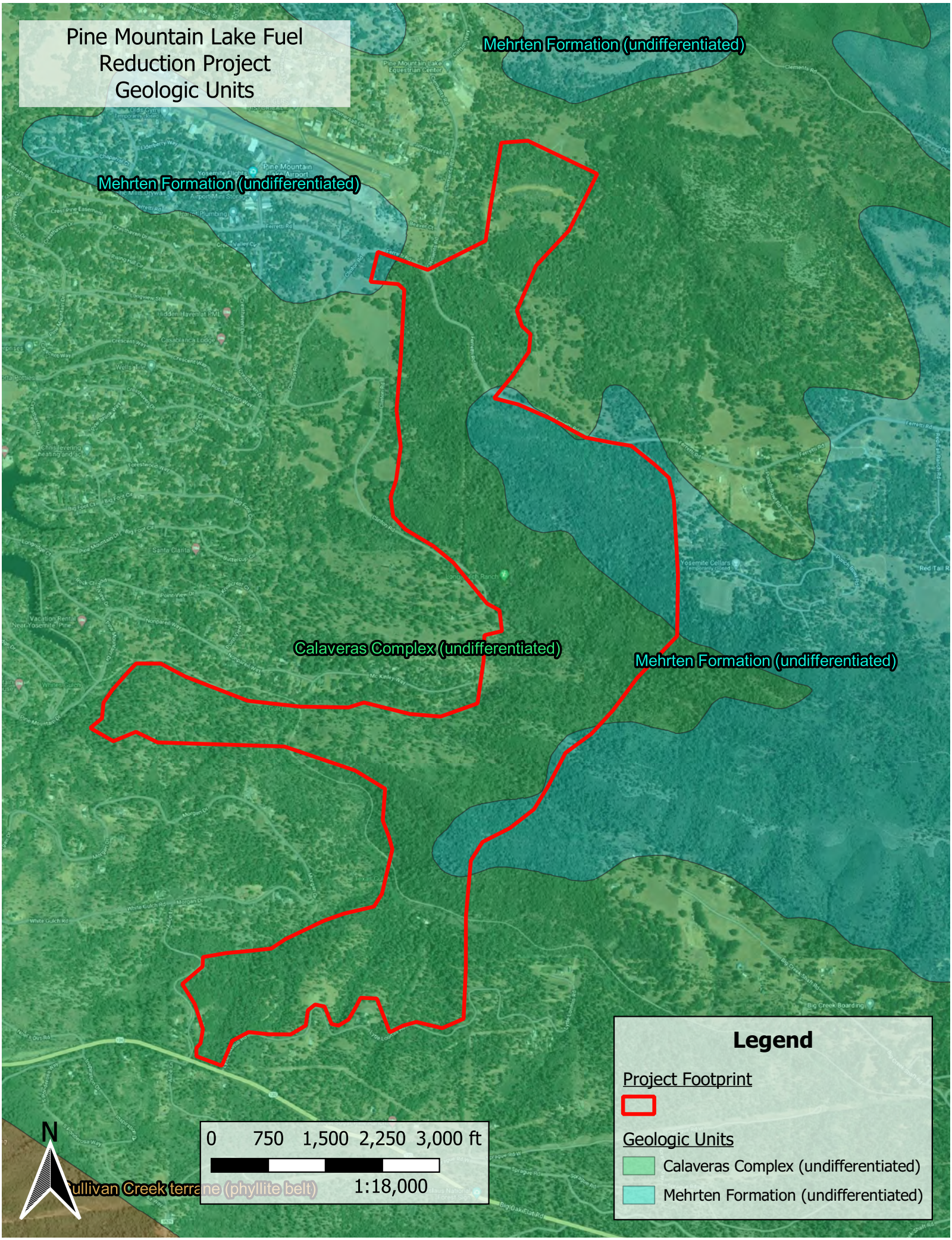
Landslide Susceptibility Classification

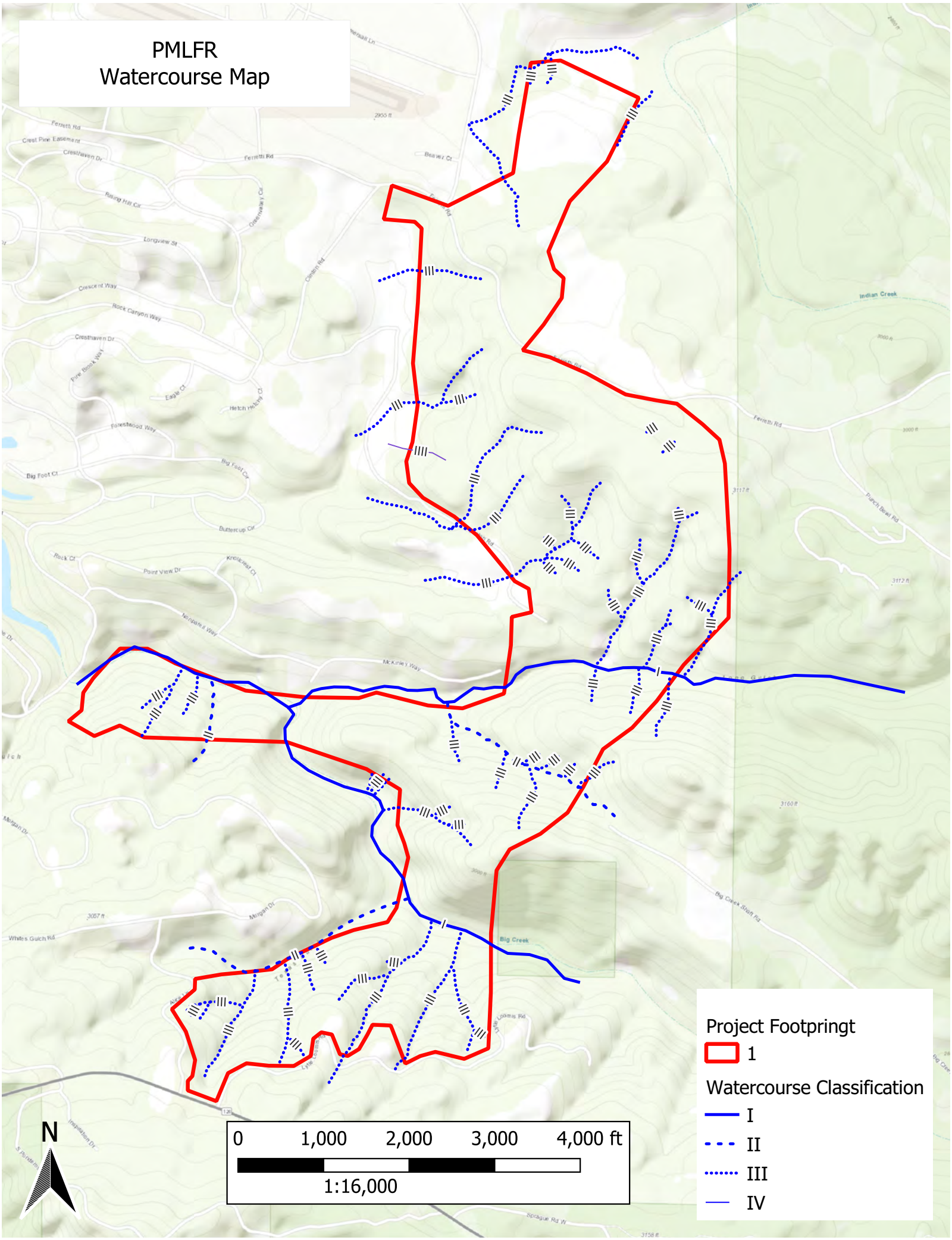
Pine Mountain Lake Fuel Reduction



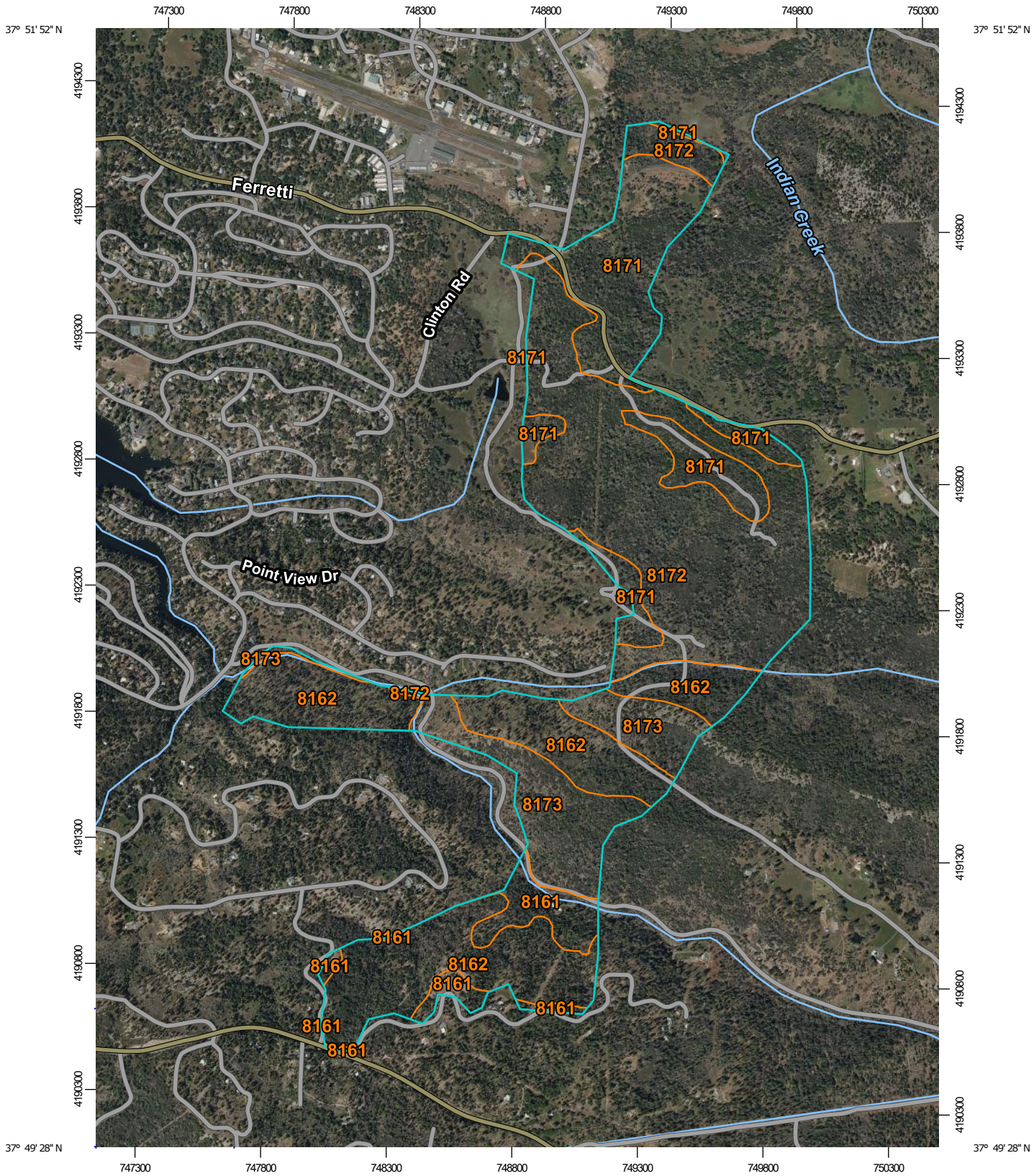


Object ID	Soil Series	Series Name	Erosion Hazard
1810	ui	ui	ui
1954	851	Coarsegold	well to exces
1963	854	Secata	moderate
2007	851	Coarsegold	well to exces
2012	851	Coarsegold	well to exces
2015	854	Secata	moderate
2027	828	Bandarita	moderate
2030	851	Coarsegold	well to exces
2108	828	Bandarita	moderate
2130	851	Coarsegold	well to exces
2135	811	Marpa	slight
2146	851	Coarsegold	well to exces
2162	811	Marpa	slight
2173	815m	Josephine (schist)	slight
2176	811	Marpa	slight
2192	811	Marpa	slight
2193	827	Mariposa	high
2199	827	Mariposa	slight
2212	ui	ui	ui
2214	811	Marpa	slight
2249	811	Marpa	slight


Pine Mountain Lake Fuel Reduction Project Geologic Units
Mehrten Formation (undifferentiated)
Mehrten Formation (undifferentiated)
Calaveras Complex (undifferentiated)
Mehrten Formation (undifferentiated)
Sullivan Creek terrane (phyllite belt)
N
0 750 1,500 2,250 3,000 ft
1:18,000
Legend
Project Footprint
Geologic Units
Calaveras Complex (undifferentiated)
Mehrten Formation (undifferentiated)


PMLFR
Watercourse Map
Project Footpringt
1
Watercourse Classification
I
II
III
IV
N
0
1,000
2,000
3,000
4,000 ft
1:16,000

Soil Map—Central Sierra Foothills Area, California, Parts of Calaveras and Tuolumne Counties
(PMLFR Soils Map)



Map Scale: 1:21,600 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 300 600 1200 1800

Feet: 0 1000 2000 4000 6000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Central Sierra Foothills Area, California, Parts of Calaveras and Tuolumne Counties
Survey Area Data: Version 7, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 11, 2022—May 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8161	Nedsgulch-Sites complex, 15 to 30 percent slopes	32.4	5.0%
8162	Nedsgulch-Arpatutu complex, 30 to 60 percent slopes	182.4	28.1%
8171	Nedsgulch-Wallyhill complex, 3 to 15 percent slopes	122.6	18.9%
8172	Nedsgulch-Wallyhill-Arpatutu complex, 15 to 30 percent slopes	230.0	35.5%
8173	Nedsgulch-Wallyhill-Arpatutu complex, 30 to 60 percent slopes	81.5	12.6%
Totals for Area of Interest		**648.8**	**100.0%**

Greenhouse gas emissions worksheet

Transportation Vehicles	Year 1			Years 2 - 5		
	Number of Trips	Miles Roundtrip	Total	Number of Trips per year	Total	Total Miles
Staff Vehicle - Gas	10	80	800	2	640	1440
Other Vehicle - Gas			0		0	0
Other Vehicle - Gas			0		0	0
Staff Vehicle - Diesel			0		0	0
Dozer Transport - Diesel	3	80	240	1	320	560
Crew Vehicle - Diesel	660	80	52800	2	640	53440
Stake Side Truck - Diesel			0		0	0
Fire Engine - Diesel	4	60	240	2	480	720
Other Vehicle - Diesel			0		0	0
Other Vehicle - Diesel			0		0	0

Construction Equipment	Year 1			Years 2 - 5		
	Number of Days	Hours Per Day	Total Hours	Number of Days Per Year	Total	Total Hours
Dozer/Loader/Grader	330	10	3300		0	3300
Misc. Equipment - Diesel			0		0	0
Misc. Equipment - Gas			0		0	0
Chainsaw /Weedeater/ Etc.	150	10	1500		0	1500
Misc. Handheld gas			0		0	0

Requires user inputted values

Greenhouse gas emissions worksheet

Greenhouse Gas (GHG) Emissions Worksheet			
Transportation Vehicles	**MILES**	**MPG**	**GAL. OF FUEL**
Staff vehicle - Gas	1,440	15	96.0
Other Vehicle Gas	0	10	0.0
Other Vehicle Gas	0	10	0.0
Staff vehicle - Diesel	0	15	0.0
Dozer Transport - Diesel	560	10	56.0
Crew Vehicle - Diesel	53,440	10	5,344.0
Stake Side Trk. - Diesel	0	10	0.0
Engine FTH- Diesel	720	10	72.0
Other Vehicle Diesel	0	10	0.0
Other Vehicle Diesel	0	10	0.0
Construction Equipment	**HOURS**	**GPH**	**GAL. OF FUEL**
Dozer/Loader/Grader - Diesel	3,300.00	8	26,400.00
Misc. Equipment - Diesel	0.00	10	0.00
Misc. Equipment - Gas	0.00	1.5	0.00
Chainsaw /Weedeater/ Ect.	1,500.00	3	4,500.00
Misc. Handheld gas	140.00	2	280.00
	TOTALS	**CF**	**KILOGRAMS**
Total Gasoline Consumption	4,876.0	8.18	39,885.68
Total Diesel Consumption	31,872.0	10.15	323,500.80

Total Metric Tons CO2e - Gas	39.89
Total Metric Tons CO2e - Diesel	323.50
Total Metric Tons CO2e	**363.39**