Nevada County

Ponderosa West Grass Valley Extension Project

CalVTP Project Specific Analysis and Addendum

May 2025

NEVADA COUNTY CALIFORNIA

PANORAMA ENVIRONMENTAL, INC.

Nevada County

Ponderosa West Grass Valley Extension Project CalVTP Project Specific Analysis and Addendum

May 2025

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1 Introduction

1.1 Overview of Proposed Project

Nevada County is proposing the Ponderosa West Grass Valley Extension Project (proposed project). The goal of the proposed project is to maintain an existing fuel break and create a new fuel break around the community of Grass Valley, as shown in Figure 1. Approximately 1,200 acres of private land was treated in western Grass Valley as part of the Ponderosa West Grass Valley Defense Zone Phase I Project, which was completed on March 15, 2022. The proposed project would involve retreatment of a portion of the 2022 treatment area, identified as Phase I of the proposed project, and fuels reduction within a new treatment area, identified as Phase II of the proposed project. The entire Phase I treatment area is 1,181 acres; approximately 600 acres of the original Phase I treatment area would be retreated under the proposed project. The Phase II treatment area would consist of a new 300.5-acre fuel break. The proposed project would result in hazardous vegetation abatement on a total of approximately 900 acres of private and County lands. Figure 2 shows the entire Phase I and II treatment areas, but not all of the Phase I treatment area would be retreated under the proposed project.

The entire project area falls within the State Responsibility Area (SRA). The proposed project area is serviced by the Nevada County Consolidated Fire District, North Penn Valley Fire District, and Rough and Ready Fire District. Most of the land proposed for treatment is private, with some County-owned parcels. Figure 3 depicts the underlying landownership across the proposed project. The majority of the project area is within high and very high fire severity zones, as shown on Figure 4.

1.2 California Environmental Quality Act

Nevada County has evaluated the proposed project for California Environmental Quality Act (CEQA) compliance as constituting later activities covered by CAL FIRE's California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR) using the Project-Specific Analysis (PSA) checklist herein. For the purposes of implementing the CalVTP, Nevada County is considered the project proponent and is serving as the CEQA lead agency.

Consistent with CEQA Guidelines (California Code of Regulations Title 14, division 6, chapter 3, section 15168(c)(2)), if the potential environmental impacts of a proposed vegetation treatment project are determined to be covered by the environmental impacts analyzed in the PEIR, the project may be approved using a finding that the project is within the scope of the PEIR. Such a finding would constitute CEQA compliance under the PEIR. The PEIR identified the range of environmental impacts associated with vegetation treatment projects and required

implementation of standard project requirements (SPRs) and mitigation measures (MMs) to address and minimize these impacts. In accordance with the PEIR, all relevant SPRs and MMs would be incorporated into the proposed project. Under CEQA, no additional review is required for a project that is consistent with the PEIR.

The CalVTP identifies the portions of California where vegetation conditions are suitable for treatments as the "treatable landscape." Within the proposed project area, 1,301 acres are within the treatable landscape and 181 acres are outside of the modeled treatable landscape. However, under the CalVTP, areas outside the treatable landscape can be included in the PEIR through an addendum if the types of vegetation are covered already, the types of treatment methods are covered, and no new or substantially greater impacts would occur. This document, therefore, also serves as an addendum to the CalVTP PEIR for the inclusion of the 181 acres outside of the modeled treatable landscape.

According to Public Resources Code (PRC) section 4291, private homeowners are required to maintain defensible space of 100 feet around structures but not beyond the property line unless a greater distance or fuel modification beyond the property line is required by regulation. Defensible space treatment activities conducted by private homeowners with private funding in accordance with state and local regulations does not constitute a project under CEQA (CEQA Guidelines sections 15377–15378) and, thus, private homeowners are not required to comply with CEQA. This analysis affords the opportunity for public funds to be used to implement defensible space on private property within 100 feet of structures; however, in general, these treatments would be conducted by the individual homeowners, who would not be required to comply with this PSA and addendum.

Figure 1 Proposed Project Region

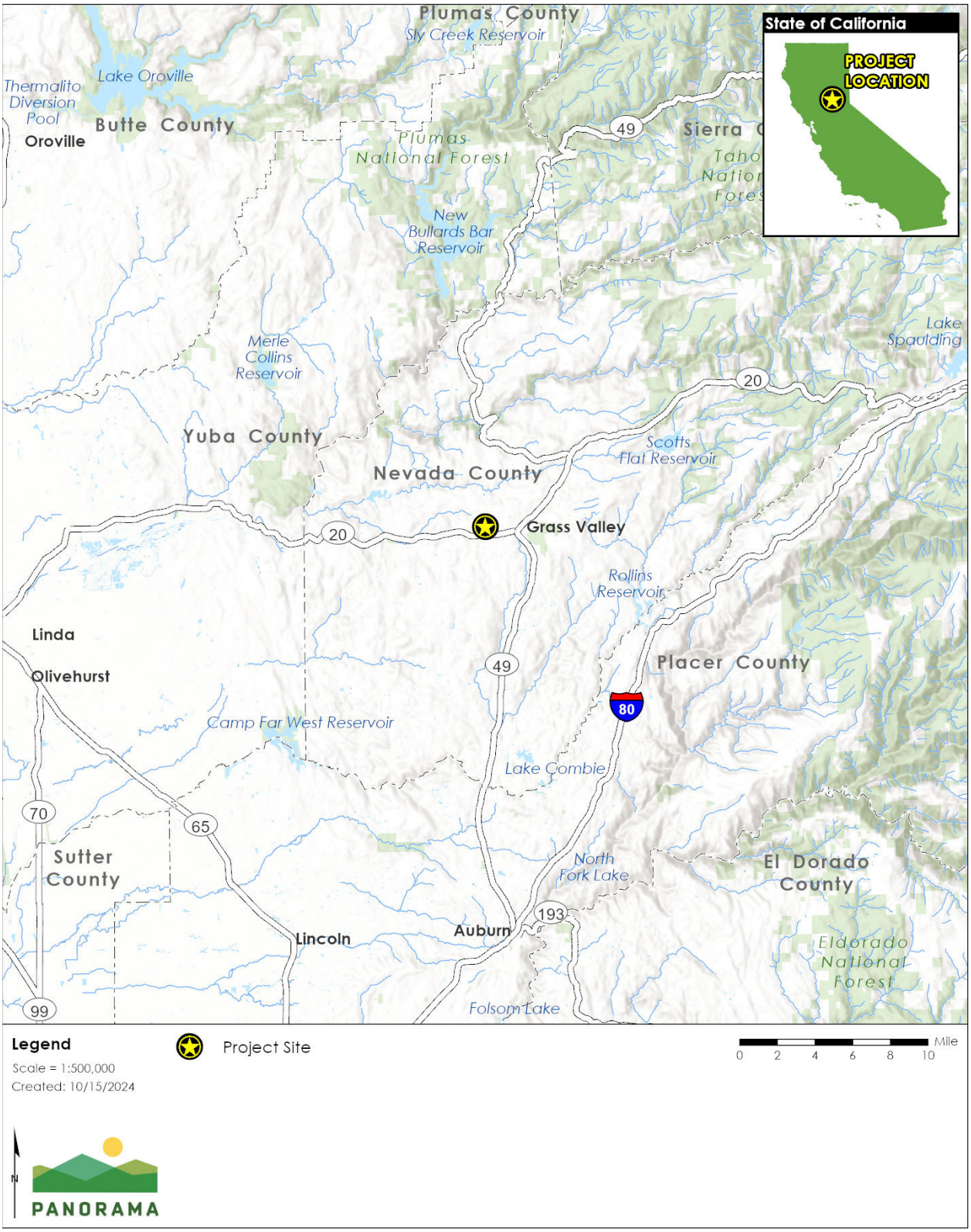


Figure 2 Overall Proposed Project

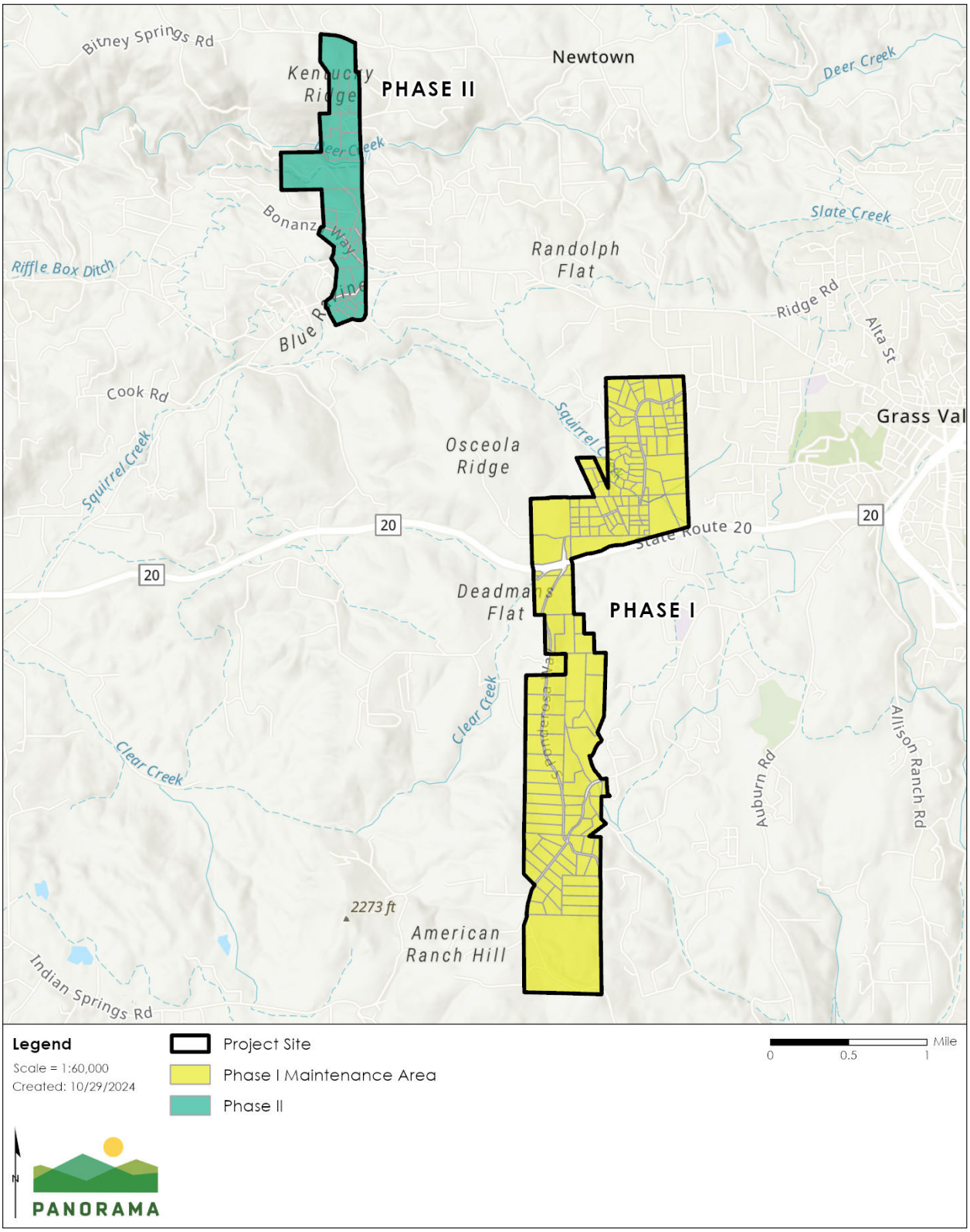


Figure 3 Land Management in the Area of the Proposed Project

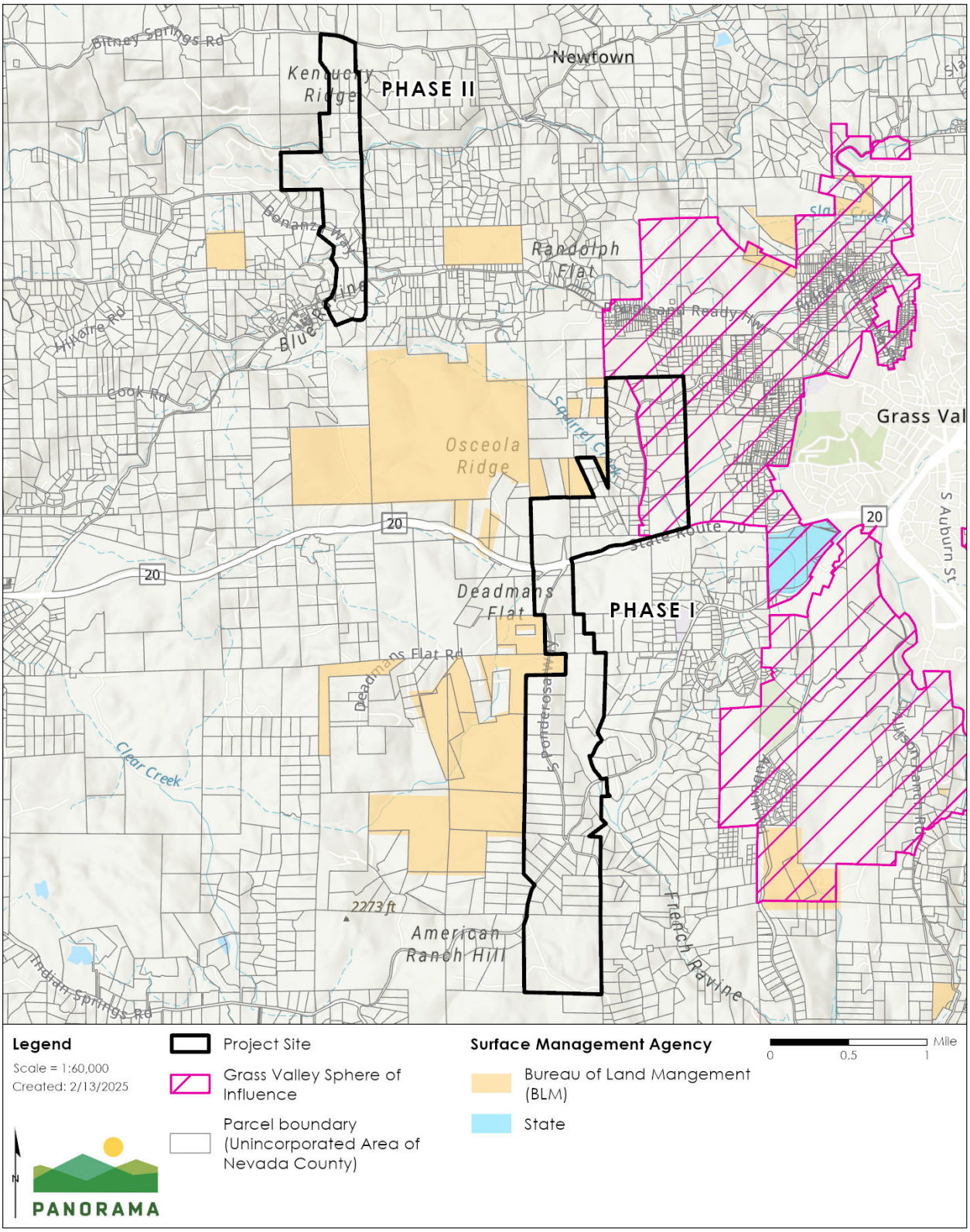
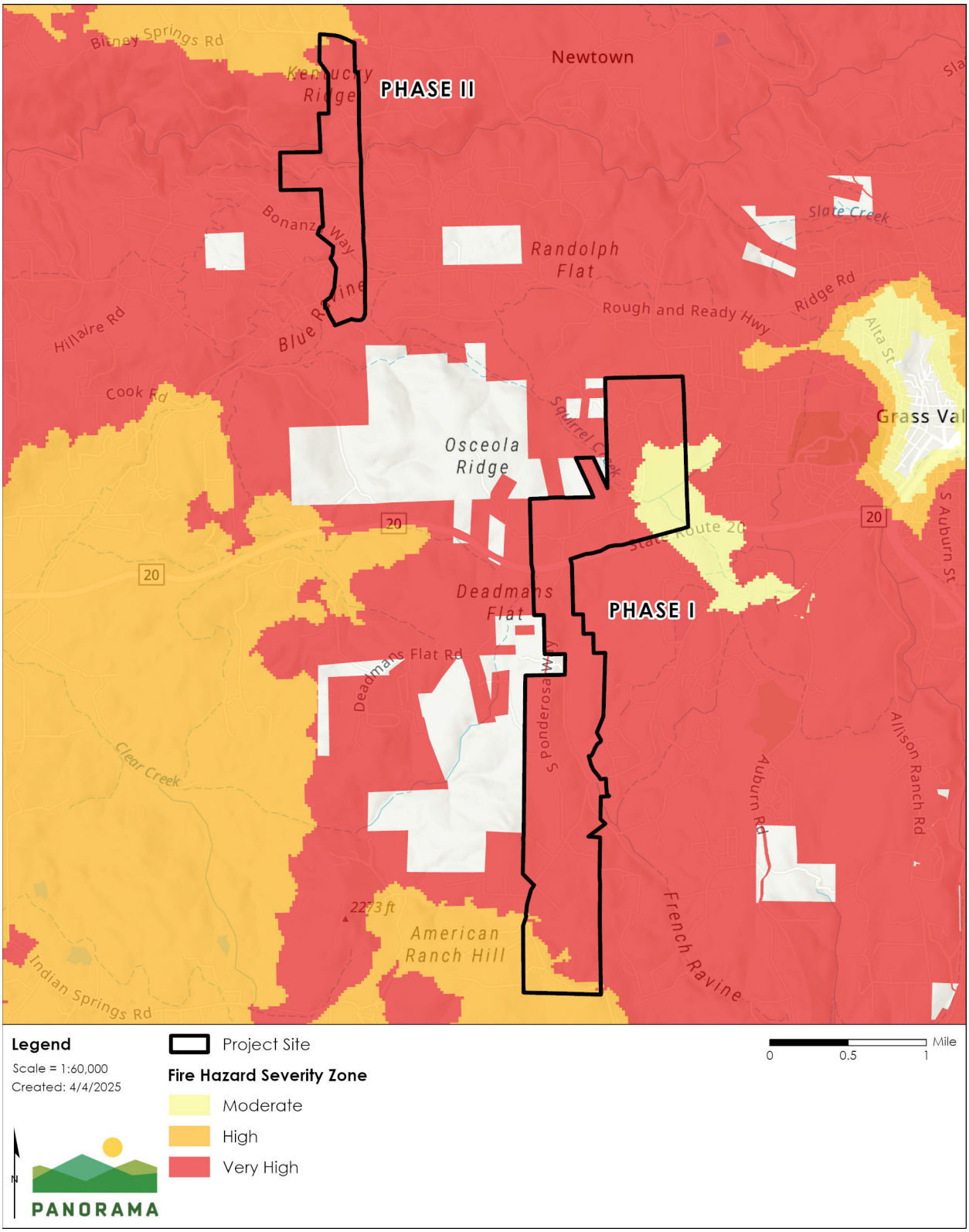


Figure 4 Fire Hazard Severity Zones



1.3 Purpose of the Project-Specific Analysis and Addendum

This document serves as a PSA and addendum to evaluate whether the proposed project is within the scope of the CalVTP PEIR. Proposed treatment projects qualifying as within the scope of the PEIR must be consistent with the treatment types and treatment activities covered in the CalVTP and the geographic extent of the CalVTP treatable landscape.

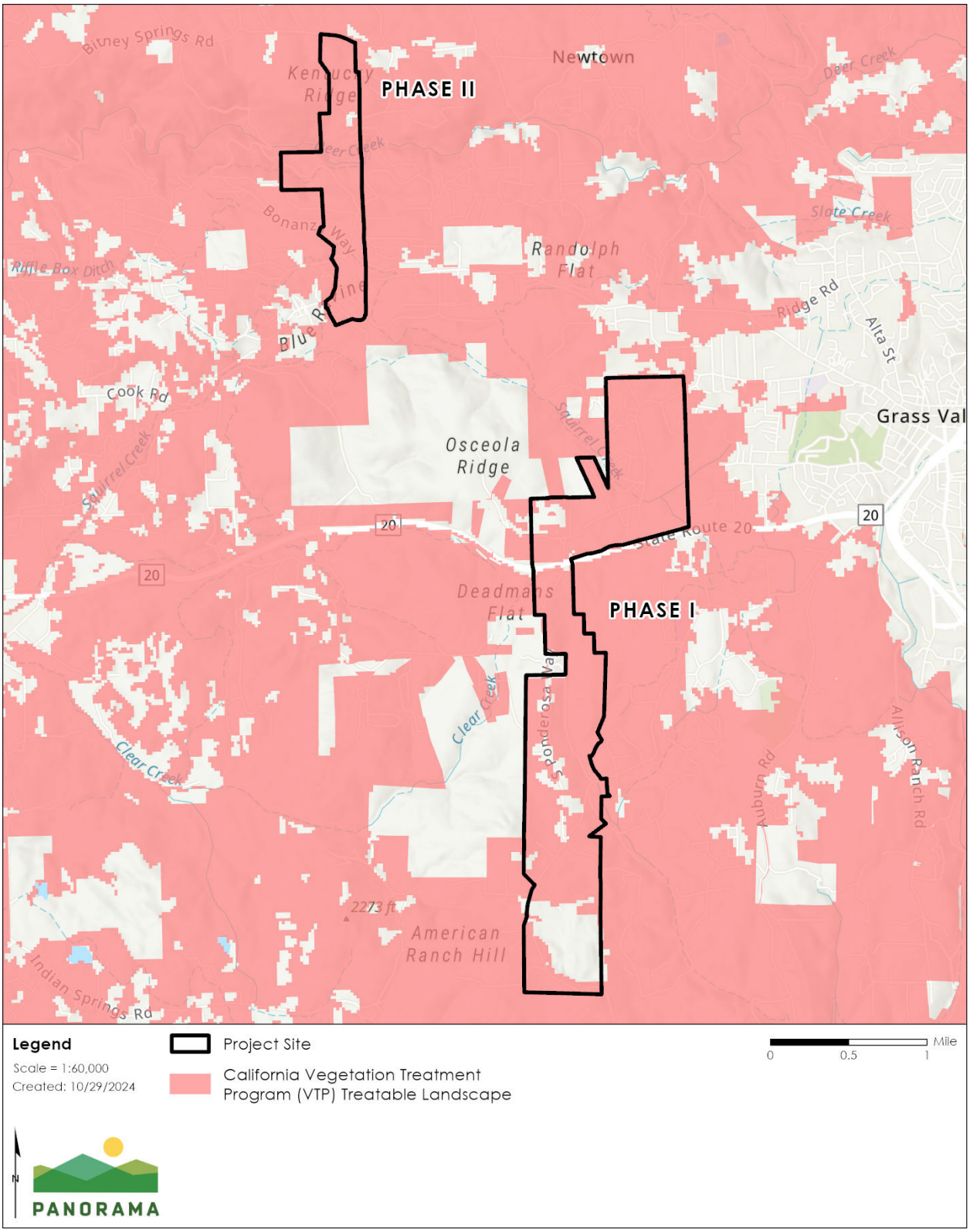
As further discussed in Chapter 2: Project Description, all proposed treatment types and treatment activities are consistent with those described in the CalVTP PEIR. The proposed project includes treatment areas that fall within the CalVTP treatable landscape as well as outside of it, as shown in Figure 5. Since the areas of the project area outside of the CalVTP treatable landscape have landscape conditions and vegetation cover essentially the same as, or substantially similar to, that of the adjacent areas within the treatable landscape, the environmental analysis in the PEIR is applicable.

Consistent with PRC 21166 and CEQA Guidelines sections 15162, 15163, 15164, and 15168, an addendum to an EIR is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed or where the circumstances surrounding the project have changed but none of the changes or revisions result in new or substantially more severe significant environmental impacts. For the proposed project, the proposal to treat areas outside of the CalVTP treatable landscape represents a minor revision or change to the project (i.e., the CalVTP treatable landscape).

The PSA checklist evaluates each environmental resource topic in terms of whether the proposed project, including the "changed condition" of additional and expanded geographic area, would result in significant impacts that would be substantially more severe than those covered in the PEIR and/or would result in any new impacts that were not covered in the PEIR.

This document serves as both a PSA and an addendum to the CalVTP PEIR for analysis under CEQA for the proposed project. The project-specific mitigation monitoring and reporting program, which identifies the CalVTP SPRs and MMs applicable to the proposed project, is included as Attachment A. The SPRs identified in Attachment A have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

Figure 5 Proposed Project Within and Outside the CalVTP Modeled Treatable Landscape



Source:

2 Project Description

2.1 Project Location

The proposed project would involve reduction of fuel loads around communities within unincorporated Nevada County and the city of Grass Valley *sphere of influence* (SOI). State Route (SR) 20 bisects the Phase I treatment area. The Phase II treatment area is approximately 1.25 miles north of SR 20, near the community of Rough and Ready. Bureau of Land Management (BLM)-managed land is directly west of the Phase I treatment area. The treatment areas are owned and/or managed by private landowners and the County, as shown in Figure 3.

2.2 Description of Project

2.2.1 Purpose

The purpose of the project is to create and maintain a continuous reduced-fuel and forest-health-restoration zone to reduce wildfire hazards, including wildfire intensity and rate of spread, and to provide strategic locations for firefighters and emergency personnel to fight a wildfire in the event of ignition. To achieve this goal, the project would rearrange and reduce fuel loading and continuity by removing dead and downed debris, pruning live trees, removing excess ladder fuels, pruning conifers and hardwoods, and breaking up the canopy continuity. Reducing surface and ladder fuels and increasing crown-to-base height would decrease crown bulk density, flame length, the potential for torching, and fire intensity. Pruning conifers and hardwoods and removing invasive species would restore horizontal spatial heterogeneity and create a mosaic pattern with openings.

2.2.2 Fuel Break

The proposed project includes the development and maintenance of a continuous fuels-reduction zone. Widths within the fuel break would be determined by fire professionals and be based on fuel types, slope, access, site conditions, and land management constraints. Treatments would focus on vertical and horizontal spacing, removal of invasive and non-native, fire hazardous vegetation, and removal of dead and dying vegetation. The vegetation types within the proposed project area are listed by acreage and percentage in Table 1.

Table 1 Proposed Project Area Habitat Type

Habitat type	Acres	Percentage
Annual Grassland	90.7	6.1%
Blue Oak-Foothill Pine	134.2	9.1%

Habitat type	Acres	Percentage
Closed-Cone Pine-Cypress[a]	26.3	1.8%
Cropland	0.1	0.01%
Mixed Chaparral	203.4	13.7%
Montane Hardwood	354.5	23.9%
Montane Hardwood-Conifer	323.0	21.8%
Ponderosa Pine	284.9	19.2%
Urban	64.1	4.3%
All habitat types	1,481.2	100%

[a] The sensitive natural community Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii*, *macnabiana*] Woodland Alliance; S3) was observed within this habitat type.

Source: Stillwater 2025

Treatment Methods

Overview

Fuel treatment methods vary depending on cover type, condition of vegetation, topography, costs, and efficiency and in conformance with landowner/manager requirements. The primary treatment methods or activities that may be implemented include manual treatments, ground-based mechanical treatment, and targeted herbicide application (see CalVTP PEIR Section 2.5.2).

Manual Treatment

Manual treatments include use of hand tools and hand-operated power tools to cut, clear, girdle, or prune herbaceous woody species and remove dead woody vegetation and low-lying shrubs and brush as well as trees. These treatments are typically used where access for larger equipment is not feasible or not appropriate. Invasive species removal can be performed by hand (or mechanically). Equipment and tools that could be used include chainsaws, pole pruners, loppers, and string trimmers.

Ground-based Mechanical Treatment

Heavy equipment or mastication would be applied to treatment areas to remove and transport existing trees and cut, crush/compact, or chop other vegetation. This equipment would generally be used on slopes up to 50 percent. Wheeled equipment would be used on a maximum slope of 30 percent. The equipment and tools that could be used include heavy equipment appropriate for the site, such as skid steers or tractors with mounted masticators and tracked and towed-behind chippers. No tilling or discing would occur. Heavy equipment operations would not be conducted within Watercourse and Lake Protection Zones (WLPZs), except for maintenance of roads and drainage facilities or structures.

Herbicide Application

Herbicides would be applied in a targeted manner. Application methods would include targeted application onto stumps and cut vegetation immediately after cutting and as follow-up

treatment, as needed, to kill or prevent regrowth of invasive and non-native species. Foliar application may be used for broom. No broadcast or aerial spraying would occur. The proposed project would use herbicides, along with other methods of invasive species eradication, as part of an integrated pest management approach. Herbicides would only be used as allowable based on local regulations and provisions in the CalVTP and in agreement with the landowner. The herbicides allowed under the CalVTP EIR include the following:

- Borax (tetraborate decahydrate)
- Clopyralid (monoethanolamine salt)
- Glyphosate (isopropylamine salt, potassium salt, dimethylamine salt, and diammonium salt)
- Hexazinone
- Imazapyr (isopropylamine salt)
- Sulfometuron Methyl
- Triclopyr (butoxyethyl ester and triethylamine salt)
- Nonylphenol 9 Ethoxylates (NP9E)
- Cleantraxx (penoxsulam and oxyfluorfen)
- Velpar (hexazinone)
- Indaziflam

Herbicide application under the CalVTP must comply with the U.S. Environmental Protection Agency (EPA) label directions as well as California Environmental Protection Agency and Department of Pesticide Regulation (DPR) label standards. The application method chosen would depend on the written recommendations of an independent pest control advisor (PCA) licensed by DPR for the targeted weed species and characteristics of the site for which the treatment is proposed. No herbicide treatments would occur within WLPZs.

Biomass Disposal

Overview

Project debris would be processed through hauling, chipping and hauling, chipping and broadcasting, mulching using a tracked masticator, and pile burning. The cut vegetation materials may be processed in a variety of ways if off-hauled, including but not limited to use in pyrolysis–biomass conversion or enhanced composting. Approximately 20 cubic yards of material could be off-hauled for processing each workday.

Chipping

A tracked towable chipper or trailer-mounted chipper may be used to process cut vegetative materials. The vegetative material would be fed through the chipper and broadcast at treatment areas or hauled away for processing. Cut material may be chipped and broadcast at treatment areas. Existing dead and downed woody debris would be chipped or masticated. Chipped material would not be broadcast onto roads, on trails, or into the water or dry channel of any streams. Chipped materials would be broadcast widely across treatment areas to avoid large chip piles. Chipped material spread on site would be chipped to under 4 inches in size and would be applied no more than 4 inches in depth to minimize wildfire risk. Vegetative material,

if removed, may be hauled to the Mountain F Enterprises facility, the McCourtney Road Transfer Station, or another appropriate biomass-processing facility or used as appropriate in other areas of Nevada County.

Pile Burning[1]

Cut material may be pile burned, depending upon access and the conditions of the treatment area. Piles would generally be 4 feet in diameter and 4 feet in height. Vegetative debris would not be piled in areas where they do not pose a threat of igniting residual overstory trees or powerlines. Feeder piles may be built in areas where there is too much vegetation to create individual piles. Feeder piles would be stacked in windrows with the end of limbs piled on one side. Where Scotch broom is removed, piles would consist of half broom and half woody material for future burning. Piles containing broom and broom seeds would be covered to ensure that the pile is contained. Suitable treatment areas are typically flat or gentle slopes and have open areas away from tree canopies and power lines. Areas selected for pile burns would be those away from waterways. Multiple piles may be burned on a single day. Pile burning would be conducted in compliance with CAL FIRE and NSAQMD Regulation 3 for open burning and burn day restrictions.

General Treatment Prescriptions

Phase I treatments would focus on the retreatment of areas that were treated in 2022. Phase I retreatments would likely be less intense than fuels reduction activities for the Phase II treatment area and would concentrate on the maintenance of conditions created during initial treatment activities. However, treatment prescriptions for Phase I and Phase II treatments areas would generally be the same. Live and dead vegetative fuels would be treated to eliminate fuel ladders and decrease horizontal and vertical continuity of flammable vegetation. Fuels reduction work would focus on the removal of dead, dying, and diseased trees before any healthy trees would be removed. Trees less than 10 inches dbh within the drip line of larger trees would be thinned and/or removed. Outside the drip line of larger diameter trees, trees less than 10 inches dbh would be thinned to achieve horizontal spacing of approximately 25 feet. Large diameter trees (10 inches dbh or greater) may be removed to achieve desired spacing to break up the overstory canopy continuity.

Post-treatment average stand density would ideally be between 75 and 100 square feet basal area on tree-dominated sites. At least one brush or a group of brush would be retained on brush-dominated sites, so that no point is further than 150 feet from a specimen. One shrub or a group of shrubs would be retained on shrub-dominated sites, so that no point is further than 30 feet from a live shrub. Disconnected clumps and individual plants of live vegetation may be retained where they do not pose as ladder fuels. All trees greater than 10 inches dbh, and shrubs greater than 8 inches stump diameter, would be retained unless:

- A tree of any size is a direct threat to personal safety or infrastructure; or

[1] In the CalVTP PEIR, pile burning is one of the two categories of burning under the treatment activity referred to as "prescribed burning." Throughout the PSA analysis, the term *pile burning* is used for clarity.

- A Registered Professional Forester (RPF) determines that an alternative standard would be preferable for meeting management objectives or would improve the health of the forest stand; and
- Is identified prior to cutting by a RPF or fire professional.

At least one snag, large woody debris, or tree that is important for wildlife would be retained. Stumps and root balls would be mostly retained, with the exception of cut stumps that pose a hazard or logistical challenge. Cut stumps would be treated with herbicide if regrowth is likely. Understory ladder fuels including non-native, invasive shrubs, along with shrub-like understory tree saplings, may be removed as may hazardous trees (e.g., dead or dying trees) identified by an RPF or qualified fire professional. Biomass would be managed through one or more of the techniques listed above.

Removal of vegetation within a WLPZ would be limited to manual treatments to create or maintain fuel break function and effectiveness. Treatments within a WLPZ would be designed to avoid impacts to riparian and aquatic function following the standard Forest Practice Rules. Dead or dying trees within a WLPZ would be marked by a RPF prior to tree removal, or tree removal would be conducted under the supervision of an RPF.

2.2.3 Schedule and Duration

Treatments would occur Monday through Sunday, primarily between 7:00 am and 6:00 pm, but work outside these hours may be required under limited conditions such as the need to finish up treatment if leaving the treatment overnight could cause a safety risk. No nighttime work would be required. Treatments are anticipated to begin in Spring/Summer 2025. Treatments each season would generally occur from April through July and November through February, as weather and on-the-ground conditions permit (e.g., red flag warnings, winter weather). Treatments that occur between May 1 and August 31 will focus on parcels without riparian areas.

2.2.4 Maintenance Treatments

Nevada County would continue to work with local stakeholders and cooperators to maintain the Phase I and Phase II treatment areas. The condition of the treatment areas after initial treatment would be monitored annually or as appropriate, depending upon the vegetation types. If maintenance does not occur annually, project areas would need to be retreated within 5 to 7 years. In forested wildlands, project areas would be treated every 10 to 12 years. Subsequent treatments are anticipated to be the same as the proposed project activities but are subject to change depending on the site's condition and response to initial treatment.

2.2.5 Workers

Typically, one crew consisting of 6 to 12 workers would be used for mechanical treatments. For hand treatments, crews would consist of up to 40 workers. Herbicide treatments would require two to four workers. Prescribed burning would consist up to 45 workers per crew. At any one time, multiple crews could be working on the project site. A qualified professional with

appropriate experience would also be on site during implementation to direct activities in compliance with this PSA.

2.2.6 Site Access

Treatment areas would be accessed via existing roads and trails to the maximum extent feasible. Private properties may be used as access points, contingent on the landowner's consent. Vehicles and equipment would be staged at the contractor's yard daily, on Nevada County property, or on private properties, given landowner consent.

3 The California Vegetation Treatment Program Environmental Checklist

Project Information

1. Project title: Ponderosa West Grass Valley Extension Project
2. Project proponent name and address: Nevada County Office of Emergency Services
3. Contact person information and phone number: AJ Zekanoski, (530) 470-2533
4. Project location: West Grass Valley
5. Total area to be treated (acres): up to 900
6. Description of project (Describe the whole action involved, including any phasing of initial treatments as well as planned treatment maintenance, including equipment to be used and planned duration of treatments. Provide cross reference to specific subsections and page numbers from Chapter 2 of the PEIR to demonstrate that treatments are consistent with those analyzed in the PEIR. Attach additional sheets if necessary.)

   See Chapter 2: Project Description
7. Treatment types (See description in CalVTP PEIR Section 2.5.1. Check every applicable category; provide detail in Description of Project.)

   ☒ Wildland-urban interface fuel reduction

   ☒ Fuel break

   ☐ Ecological restoration

8. Treatment activities (See description in CalVTP PEIR Section 2.5.2. Check every applicable category; include number of acres subject to each treatment activity; provide detail in description of Initial Treatment.)

   ☐ Prescribed burning (broadcast)

   ☒ Prescribed burning (pile burning), of fuel collected from up to 80 acres

   ☒ Mechanical treatment: 660 acres of fuel break treatment

   ☒ Manual treatment, up to 1,500 acres of fuel break treatment

   ☐ Prescribed herbivory, as and where appropriate

☒ Herbicide application, as and where appropriate within up to 50 acres of the project area

9. Fuel type (See description in CalVTP PEIR Section 2.4.1. Check every applicable category; provide detail in description of Initial Treatment]

   ☒ Grass fuel type

   ☒ Shrub fuel type

   ☒ Tree fuel type

10. Geographic scope

    ☐ The treatment site is entirely within the CalVTP treatable landscape.

    ☒ The treatment site is NOT entirely within the CalVTP treatable landscape.

11. Surrounding and uses and setting

    The project site is surrounded by rural residences and open space.

12. Other Public Agencies Whose Approval is Potentially Required

Agency	Approval or notification	Component of program
California Department of Transportation (Caltrans)	encroachment permits	for trimming or removal of trees within and encroachment on Caltrans right-of-way
Caltrans	transportation permits	for oversize or overweight vehicles traveling on Caltrans right-of-way
California Department of Forestry and Fire Protection	burn permit	for any pile burn activities in the State Responsibility Area
California Department of Fish and Wildlife	streambed alteration agreement	for work within jurisdictional waters
Northern Sierra Air Quality Management District	Air Pollution Permit Application	for any pile burn activities
Central Valley Regional Water Quality Control Board	waste discharge requirement	for potential impacts to waters of the state that are not waters of the U.S.
Nevada County	tree removal permit	for removal of trees greater than ten inches dbh
City of Grass Valley	tree removal permit	removal of trees greater than ten inches dbh on any private lands; removal of significant trees or street trees greater than 24 inches dbh on any public lands or within the public right-of-way

13. Coastal Act compliance

☒ The proposed project is NOT within the Coastal Zone.

☐ The proposed project is within the Coastal Zone (check one of the following boxes).

☐ A coastal development permit has been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable.

☐ The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required.

14. Native American consultation

(Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an Environmental Impact Report, Negative Declaration, or Mitigated Negative Declaration. For treatment projects that require additional CEQA review and documentation, have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? Note: For treatment projects that are within the scope of this PEIR, AB 52 consultation has been completed. The Board of Forestry and Fire Protection and CAL FIRE completed consultation pursuant to Public Resources Code section 21080.3.1 in preparation of the PEIR.)

Pursuant to SPR CUL-2, Nevada County contacted culturally affiliated tribes via email in October 2024 with project information and a solicitation for any relevant information regarding the project area. A response was provided by the NAHC on November 6, 2024, which stated that there are no Native American sacred sites within the project area. The project is within the scope of the PEIR and does not require additional CEQA review and documentation.

15. Use of the PSA for treatment maintenance

(Prior to implementing a maintenance treatment, the project proponent would verify that the expected site conditions as described in the PSA are present in the treatment area. As time passes, the continued relevance of the PSA would be considered by the project proponent in light of potentially changed conditions or circumstances. Where the project proponent determines that the PSA is no longer sufficiently relevant, the project proponent would determine whether a new PSA or other environmental analysis is warranted. In addition to verifying that the PSA continues to provide relevant CEQA coverage for treatment maintenance, the project proponent would update the PSA at the time a maintenance treatment is needed when more than 10 years have passed since the

approval of the PSA or the latest PSA update. For example, the project proponent may conduct a reconnaissance survey to verify that conditions are substantially similar to those anticipated in the PSA. Updated information should be documented.)

Prior to re-treating any area within the project boundary, Nevada County Office of Emergency Services would verify that site conditions described in the PSA are still relevant. Maintenance treatments would be ongoing and are covered under this PSA, but this PSA would be updated as appropriate.

16. Standard project requirements and mitigation measures

(Refer to Attachment A to identify which SPRs and Mitigation Measures apply to the project. Complete Attachment A to document the responsible party for each applicable SPR and Mitigation Measure. Check one box below.)

☒ All applicable SPRs and Mitigation Measures are feasible and will be implemented.

☐ There is NO new information which would render mitigation measures previously considered infeasible or not considered in the CalVTP EIR now feasible OR such mitigation measures have been adopted (Guidelines Sec. 15162 [a][3]; PRC Sec. 21166[c])

☐ All applicable SPRs and Mitigation Measures are NOT feasible or will NOT be implemented *(provide explanation).*

Explanation:

Determination

On the basis of this initial evaluation:

☒ I find that all the effects of the proposed project (a) have been covered in the CalVTP PEIR, and (b) all applicable Standard Project Requirements and mitigation measures identified in the CalVTP PEIR will be implemented. The proposed project is, therefore, WITHIN THE SCOPE of the CalVTP PEIR. NO ADDITIONAL CEQA DOCUMENTATION is required.

☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR. These effects are less than significant without any mitigation beyond what is already required pursuant to the CalVTP PEIR. A NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR or will have effects that are substantially more severe than those covered in the CalVTP PEIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP PEIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project partners that would avoid or reduce the effects so that clearly no significant effects would occur. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project will have significant environmental effects that are (a) new and were not covered in the CalVTP PEIR and/or (b) substantially more severe than those covered in the CalVTP PEIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an ENVIRONMENTAL IMPACT REPORT will be prepared.

Alex Keeble-Toll APPROVED By Alex Keeble-Toll at 11:41 am, Apr 30, 2025

Signature

4/30/2025

Date

Alex Keeble-Toll

Printed Name

Interim Director, Emergency Services

Title

Evaluation of Environmental Impacts

1. A brief explanation is required for each impact, standard project requirement (SPR), and mitigation measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may vary throughout the lifespan of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is (definitions located in the CalVTP PEIR Chapter 3 Environmental Settings, Impacts, and Mitigation Measures, Section 3.1.4 Terminology Used In the PEIR):
    a. Less than significant (LTS): An impact, either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required) or is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
    b. Less than significant with mitigation (LTSM): An impact was identified within the PEIR that was viewed in totality as potentially significant and/or significantly unavoidable, and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented, mitigating to a point of less than significance.

c. Potentially significant (PS): An impact treated as if it were a significant impact. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
d. Potentially significant and unavoidable (PSU): An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
e. Significant and unavoidable (SU): An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
f. Not applicable (N/A): If the impact is determined to be the same or equal to the impact in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration, or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.

4. Where a Negative Declaration or Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. In the preparation of any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.
5. Standard project requirements (SPRs) and mitigations measures (MMs).
   a. Applicable (yes/no). Document whether the SPR or mitigation measure is applicable to the project (yes or no). The applicability should be substantiated in the Environmental Checklist Discussion.
   b. Implementing entity. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archaeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
   c. Verifying/monitoring entity. The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.
   d. Note: The cited SPRs and MMs are summarized to manage the template size. Refer to Attachment A for the approved CalVTP.

Cumulative Scenario

The CalVTP PEIR included a cumulative analysis following the State CEQA Guidelines. This analysis assumed 250,000 acres treated annually under the CalVTP spanning the State of California. It also considered related programs such as other activities conducted by CAL FIRE, plans, projects, and activities that would affect the same resources as the CalVTP in similar ways along with activities conducted by other entities outside of the SRA (within the Federal Responsibility Area [FRA] and Local Responsibility Area [LRA]) that would affect the same resources as the CalVTP in similar ways (see PEIR, page 4-1). The broad nature of the cumulative analysis in the CalVTP PEIR takes into account projects occurring in the Nevada County area that are not specifically identified in the CalVTP PEIR analysis. However, in order to inform the public, known cumulative projects in the area of the Ponderosa Project are listed in Table 3-1.

Table 3-1 Nevada County Region Vegetation Management Projects

Number	Cumulative project name	Description	Cumulative project acres/miles
1	South Yuba Rim Hazardous Fuels Reduction Project	A landscape-level fuel reduction project on the San Juan Ridge in Nevada County, aimed at reducing the risk of catastrophic wildfire through strategic fuel reduction activities. It is intended to limit wildfire spread, protect communities and essential infrastructure, and enhance the ecological resilience of the area to better withstand and recover from wildfire events. This project is the culmination of many years of coordination and advocacy of community leaders, Firewise Communities, the Bureau of Land Management (BLM), CAL FIRE, and the Yuba Watershed Institute (YWI). Funded by the Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency Services (CalOES),	6,900 acres/17 miles
2	South County Shaded Fuel Break	The South County Shaded Fuel Break is designed to create safe ingress for first responders and egress for evacuating residents. The project, when complete, will treat 75 feet on either side of the roadway to create a shaded fuel break that is a total of 150 foot wide in the vicinity of Alta Sierra.	339 acres
3	Woodpecker Ravine Project	The full Woodpecker Ravine project is a multifaceted $43 million project that proposes geographically targeted fuel modification and home hardening in Woodpecker Ravine, coupled with a robust community education and engagement campaign. The project will provide home-hardening to nearly 1,300 residences and defensible space assistance.	2,100 acres

Number	Cumulative project name	Description	Cumulative project acres/miles
4	Sierra Foothill Forest Climate Resilience Project	The purpose of this project is to improve forest health and wildlife habitat by treating Sierra Nevada foothill forest through a combination of targeted hand-thinning and mastication of shrubs, small trees, and invasive species; application of prescribed fire; planting native species; and targeted herbicide application to increase duration between treatments.	625 acres
5	Wildfire Resilient Communities and Landscapes Collaboration	A Good Neighbor Agreement between the Tahoe National Forest and Nevada County to treat roadside vegetation in the Truckee Ranger District. Funding was provided by the Truckee Meadows Water Authority to protect water supply through the expansion of current fuel break initiatives in the Ranger District.	115 acres
6	Roadside Hazardous Fuels Reduction	A Good Neighbor Agreement between the Tahoe National Forest and Nevada County to treat roadside vegetation in the Yuba Ranger District. Funding is from the Bipartisan Infrastructure Law and is intended to complement numerous existing wildfire mitigation projects in the South Yuba Rim by bolstering ingress/egress and tying into strategic fuel break infrastructure.	360 acres

3.1 Aesthetics and Visual Resources

3.1.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact AES-1: Result in short-term, substantial degradation of a scenic vista or visual character or quality of public views, or damage to scenic resources in a state scenic highway from treatment activities?	LTS	Impact AES-1, pp. 3.2-16–3.2-19	yes	AES-2, AQ-2, AQ-3, REC-1	NA	LTS	no	yes
Impact AES-2: Result in long-term, substantial degradation of a scenic vista or visual character or quality of public views, or damage to scenic resources in a State scenic highway from WUI fuel reduction, ecological restoration, or shaded fuel break treatment types?	LTS	Impact AES-2, pp. 3.2-20–3.2-25	yes	AD-4, REC-1, AES-1, AES-2, AES-3	NA	LTS	no	yes
Impact AES-3: Result in long-term substantial degradation of a scenic vista or visual character or quality of public views, or damage to scenic resources in a state scenic highway from the non-shaded fuel break treatment type?	SU	Impact AES-3, pp. 3.2-25–3.2-27	no	NA	none	no impact	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New aesthetic and visual resource impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.1.2 Discussion

Impact AES-1

The proposed project would develop and maintain a fuels-reduction zone through use of manual treatments, ground-based mechanical treatments, and targeted herbicide application as well as biomass disposal, including pile burning. The potential for these treatment activities to result in short-term degradation of the visual character of a treatment area was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.2.3, pages 3.2-16–3.2-19). The visual character within the fuels-reduction zone is characterized by primarily residential areas, agriculture, and open space. The treatments would occur on private lands in the City of Grass Valley sphere of influence and in unincorporated Nevada County.

The City of Grass Valley General Plan does not contain any designated scenic highways or vistas but recognizes that the City of Grass Valley contains a wide variety of landscapes and scenic resources, including views from roadways and vistas of foothills and mountains (City of Grass Valley 2020). The Nevada County General Plan designates all of State Highway 20 as a scenic corridor (Nevada County 1995). Portions of the Phase I maintenance area are located directly adjacent to State Highway 20. State Route 49 is an eligible State Scenic Highway approximately 1.25 miles east of the Phase I maintenance area (Caltrans n.d.).

Viewers in the vicinity of the treatment areas would be mostly residents and people traveling by vehicle on nearby roads. Equipment and trucks and chipped and cut vegetation debris would be temporarily visible along or staged near these fuels-reduction zones. SPRs AES-2, REC-1, AQ-2, and AQ-3, which would be implemented by the proposed project, require that treatment-related equipment be stored outside of the public viewshed, that recreational users be notified of any temporary recreation area closures, and that a Smoke Management Plan be submitted for pile burning activities that trigger the threshold (17 CCR section 80160) to minimize the generation and visibility of smoke from burning activities. The potential for the proposed project to result in short-term substantial degradation of the visual character near the project area or damage to a scenic highway visible from the proposed project area is within the scope of the PEIR. Impacts would be less than significant.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing scenic resources are essentially the same within and outside of the treatable landscape because the vegetation types and visual context are the same and are contiguous with the treatable landscape. A viewer's perception would not naturally differentiate between portions of the

project area within and outside the treatable landscape. This determination is consistent with the PEIR. Impacts would be less than significant.

Impact AES-2

The potential for the proposed project treatments to result in long-term degradation of the visual character of an area was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.2.3, pages 3.2-20–3.2-22). Removal of hazard trees and fire-hazardous native and non-native trees, as well as the thinning of native and non-native shrubs, would result in a change in viewer experience. As noted in the PEIR Impact AES-2, in the case of a shaded fuel break, because not all of the existing vegetation would be cleared and large native trees would remain, vividness, intactness, and unity of views would remain, and the treatments would not substantially affect views. The proposed project would be designed to improve habitat quality and create a landscape appearance closer to pre-fire-suppression conditions and as noted in the PEIR, this change could result in long-term beneficial visual impacts. Treatment areas may, however, be visible from public viewpoints and nearby eligible scenic highways (Highway 20 and 49). The aesthetic impacts would be temporary and short-term, and the natural characteristics of the treatment areas would remain. Implementation of SPRs AES-1, AES-2, and AES-3 would minimize long-term degradation of the visual character through thinning and feathering of adjacent vegetation to break up or screen linear edges and by providing vegetation screening within and adjacent treatment areas. The potential for the proposed project to result in long-term substantial degradation of the visual character of the project area is less than significant and is consistent with the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing visual character is essentially the same within and outside of the treatable landscape, as described in Impact AES-1. This determination is consistent with the PEIR.

Impact AES-3

The proposed treatments would not include the non-shaded fuel break treatment type as defined in the PEIR (CalVTP Final PEIR Section 2.5.1, page 2-11).[2] The proposed project would not result in the potential for long-term substantial degradation of the visual character due to non-shaded fuel break treatment types.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to the approximately up to 250,000 treated acres annually that are located within the 20.3-million-acre treatable landscape. The geographic scope of the aesthetic and visual resource cumulative impact analysis from the CalVTP PEIR is the treatable landscape and surrounding areas with public views of the treatable landscape. In addition to the lands treated under the CalVTP PEIR, there are several similar past, present, and

[2] **Non-shaded fuel breaks** are typically created where there is a natural change in vegetation type, such as from forest or shrubland to grassland, and all vegetation is removed from the fuel break.

reasonably foreseeable projects that have affected and likely would affect vegetation and, thus, aesthetics and visual resources within and surrounding the treatable landscape (CalVTP Final PEIR Section 4.4.1 page 4-11). Table 3-1 includes a list of vegetation treatment projects occurring within the Nevada County area. Based on review of the CalVTP PEIR cumulative analysis, the cumulative projects listed in Table 3-1 and the proposed project are adequately addressed by the PEIR cumulative analysis for aesthetics. Therefore, the cumulative aesthetic impact analysis for the proposed project is the same as described in the PEIR and is not cumulatively considerable for Impact AES-1 and Impact AES-2. The PEIR found that impacts are cumulatively considerable for Impact AES-3; however, since the proposed project does not include any non-shaded fuel break treatment types, the proposed project would not contribute to the significant cumulative impact.

New Aesthetic and Visual Resources Impacts

The site-specific characteristics of the proposed project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.2.1 Environmental Setting and Section 3.2.2 Regulatory Setting in Volume II of the Final PEIR). The existing environmental conditions pertinent to aesthetics and visual resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed project is consistent with the types of projects covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not constitute a new or substantially more severe significant impact than what was included in the PEIR. Therefore, no new impacts related to aesthetics and visual resources would occur.

3.2 Agriculture and Forestry Resources

3.2.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact AG-1: Directly result in the loss of forest land or conversion of forest land to a non-forest use or involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?	LTS	Impact AG-1, pp. 3.3-7–3.3-8	yes	NA	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New agricultural and forestry resources impacts: Would the treatment result in other impacts to agriculture and forestry that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.2.2 Discussion

Impact AG-1

The vegetation communities in the project area include ponderosa pine, montane hardwood, mixed chaparral, and blue oak foothill pine. Treatment within the project area would focus on the removal of dead, dying, and diseased trees before the removal of any healthy trees. Tree removal would primarily target trees less than 10 inches dbh; however, some large diameter trees (10 inches dbh or greater) may be removed to break up the canopy continuity. Tree cover within woodlands and forested areas remaining after treatment would be consistent with the definition of forest land used in PRC 12220(g): land that can support 10-percent native tree cover of any species under natural conditions. Treatments would not affect the native forest stand conditions directly or indirectly in a way that could result in conversion to non-forest use. Vegetation management has the potential to improve the forest stand conditions by removing competitive non-native or overcrowded native vegetation and returning the forests to more natural conditions. The impacts to forestry resources of the proposed project are within the scope of the PEIR and consistent with those analyzed in the PEIR. Impacts of the proposed project would be less than significant, and no SPRs or mitigation are required.

The proposed project includes treatment on land that is outside the CalVTP treatable landscape, which constitutes a minor change to the geographic extent presented in the PEIR. The existing conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because the vegetation types are the same and are contiguous with the treatable landscape. This impact to forested land as defined in PRC 12220(g) is essentially the same within and outside the treatable landscape. No SPRs are applicable to this impact. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to some of the approximately 250,000 acres treated annually that are located within the 20.3-million-acre treatable landscape. The geographic scope for agricultural and forestry resources is the treatable landscape (CalVTP Final PEIR Section 4.4.2, page 4-12). The cumulative projects listed in Table 3 1 are consistent with the cumulative projects identified in the CalVTP EIR. Although treatment activities would alter forest land through vegetation removal, the activities would be temporary and, once treatment activities are complete, the area would remain undeveloped, existing forest. Therefore, the proposed project's contribution to the loss of forest land or conversion of forest

land to non-forest use would not be cumulatively considerable and would be consistent with the analysis in the PEIR.

New Agriculture and Forestry Resource Impacts

The site-specific characteristics of the proposed project area have been considered and found to be consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.3.1 Environmental Setting and Section 3.3.2 Regulatory Setting in Volume II of the Final PEIR). The conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because the vegetation types are the same and are contiguous to the treatable landscape. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts not addressed in the PEIR. Therefore, no new impact related to agriculture and forestry resources would occur that is not covered in the PEIR.

3.3 Air Quality

3.3.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact AQ-1: Generate emissions of criteria air pollutants and precursors during treatment activities that would exceed CAAQS or NAAQS?	SU	Table 3.4-1; Impact AQ-1, pp. 3.4-26–3.4-32; Appendix AQ-1	yes	AD-4, AQ-1 through AQ-6	AQ-1	PSU	no	yes
Impact AQ-2: Expose people to diesel particulate matter emissions and related health risk?	LTS	Table 3.4-6; Impact AQ-2, pp. 3.4-33–3.4-34; Appendix AQ-1	yes	AQ-1, HAZ-1, NOI-4, NOI-5	NA	LTS	no	yes
Impact AQ-3: Expose people to fugitive dust emissions containing naturally occurring asbestos and related health risk?	LTS	Section 3.4.2; Impact AQ-3, pp. 3.4-34–3.4-35	yes	AQ-4, AQ-5	NA	LTS	no	yes

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact AQ-4: Expose people to toxic air contaminants emitted by prescribed burns and related health risk?	SU	Section 3.4.2; Impact AQ-4, pp. 3.4-35–3.4-37	yes	AD-4, AQ-2, AQ-3, AQ-6	NA (no feasible mitigation available)	PSU	no	yes
Impact AQ-5: Expose people to objectionable odors from diesel exhaust?	LTS	Impact AQ-5, pp. 3.4-37–3.4-38	yes	HAZ-1, NOI-4, NOI-5	NA	LTS	no	yes
Impact AQ-6: Expose people to objectionable odors from smoke during prescribed burning?	SU	Section 2.5.2; Impact AQ-6; p. 3.4-38	yes	AD-4, AQ-2, AQ-3, AQ-6	NA (No feasible mitigation available)	PSU	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New air quality impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.3.2 Discussion

Impact AQ-1

The proposed project would use vehicles, equipment, mechanical hand tools, and pile burning, which could generate criteria air pollutants that could cause or substantially contribute to the violation of California ambient air quality standards (CAAQS) or national ambient air quality standards (NAAQS) for the Mountain Counties Air Basin (MCAB) (CARB 2014). Western Nevada County is currently in non-attainment status for ozone for the NAAQS and non-attainment for coarse particulate matter (PM_{10}), and ozone for the CAAQS (CARB 2023; EPA 2024). The potential for emissions of criteria pollutants to result in an exceedance or contribute to exceedances of CAAQS or NAAQS thresholds was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, pages 3.4-26–3.4-33). Emissions of criteria air pollutants related to the proposed project are within the scope of the PEIR because the associated equipment and duration of use, and types of treatments, are consistent with those analyzed in the PEIR.

The SPRs applicable to the proposed project include AD-4 and AQ-1 through AQ-6. SPR AD-4 requires public notification for areas with pile burning treatments prior to commencement of pile burning activities. SPRs AQ-1 through AQ-6 require the project to comply with applicable Northern Sierra Air Quality Management District (NSAQMD) air quality requirements, submit a Smoke Management Plan and Burn Plan if the pile burning triggers the threshold (17 CCR § 80160), and follow all safety procedures required of a CAL FIRE crew.

In addition to the SPRs, MM AQ-1 is applicable to the proposed project and would reduce exhaust emissions from off-road equipment because it would require using renewable diesel fuel in diesel-powered construction equipment, substituting electric and gas-powered equipment for diesel equipment, and utilizing equipment that meets the Environmental Protection Agency's (EPA) Tier 4 emission standards when feasible. However, given the uncertainty of whether renewable diesel fuel or electric and gas-powered equipment would be available at any specific time during the implementation of the proposed project, the project could still have impacts. The impacts, however, would be within the scope of the impacts addressed in the PEIR, which acknowledges that potentially significant and unavoidable impacts may occur. There are no changes in circumstances that would occur in the proposed project that were not evaluated in the PEIR. Following the implementation of applicable SPRs and MMs, the proposed project's potential to generate emissions of criteria air pollutants and precursors during treatment activities that would exceed CAAQS or NAAQS and conflict with regional air quality plans would remain within the scope of the PEIR's analysis, which is potentially significant and unavoidable because, as stated in the PEIR, the emissions reduction

as a result of implementing MM AQ-1 cannot be quantified as myriad variables are assessed in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 33).

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the project area, the existing air quality conditions in the areas outside the treatable landscape are the same as those within the treatable landscape, which are within the same air basin. Emissions from the proposed project are based on acreages and treatment activities and, thus, fall within the PEIR's analysis and are within the scope of the PEIR's determination that the impacts would be potentially significant and unavoidable, but SPRs AD-4 and AQ-1 through AQ-6 would still be implemented.

Impact AQ-2

Vehicles and mechanical equipment for treatment activities would emit diesel particulate matter. The potential to expose people to diesel particulate matter was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, pages 3.4-33–3.4-34). The proposed project would implement SPRs AQ-1, HAZ-1, NOI-4, and NOI-5, which would minimize the exposure of people to diesel particulate matter emissions. SPR AQ-1 requires compliance with all applicable air quality regulations, and SPR HAZ-1 requires that all diesel and gasoline-powered equipment be properly maintained to comply with all state and federal emission requirements. In addition, SPR NOI-4 requires vegetation treatment activities and staging areas be located as far as possible from human receptors, and SPR NOI-5 restricts equipment idling time. Diesel particulate matter emissions from the proposed project would be less than significant, and its impacts are within the scope of the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the air quality conditions and sensitive receptors present (i.e., exposure potential) in the portions of the project outside the treatable landscape are essentially the same as those within the treatable landscape because the areas and associated receptors are adjacent and the equipment emitting the diesel particulate matter would be the same. Therefore, the air quality impact is also the same (less than significant), as described above. There are no changes in circumstances that would occur in the proposed project that were not evaluated in the PEIR.

Impact AQ-3

Vehicles and mechanical equipment used during treatments would cause ground-disturbance. Preparation for pile burning could require some disturbance, such as when dragging vegetation around or implementing control lines. The potential to expose people to naturally occurring asbestos (NOA)-containing fugitive dust emissions was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, pages 3.4-34–3.4-35). No known NOA sites are located within or adjacent to the project area (CDOC n.d.). Potential NOA exposure from the proposed treatments would be less than significant and is within the scope of the activities and impacts addressed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing environmental conditions in the portions of the project area outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent and are underlain by the same type of soils. Therefore, the asbestos exposure impact would also be the same, as described above, and would be less than significant. This determination is consistent with the PEIR.

Impact AQ-4

Pile burning could expose people to toxic air contaminants, including particulate matter. The potential to expose people to toxic air contaminants from prescribed burning (including pile burning) was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, pages 3.4-35–3.4-37). The duration and parameters of the pile burns are within the scope of the activities addressed in the PEIR, and the potential for exposure to toxic air contaminants is also within the scope of the PEIR. The applicable SPRs include AD-4, AQ-2, AQ-3, and AQ-6. The public would be notified of any pile burning, pursuant to SPR AD-4. Implementation of SPRs AQ-2 and AQ-3 requires the submittal of a Smoke Management Plan and Burn Plan. Crews performing pile burns are required to follow all safety procedures required of a CAL FIRE crew, pursuant to SPR AQ-6. The PEIR identifies the impact from prescribed burning (which includes pile burning) as significant and unavoidable. As examined in the PEIR, no additional mitigation measures are feasible, and the impact would remain potentially significant and unavoidable. The impacts from the pile burning for the proposed project were not quantified but would fall within the finding of the PEIR of potentially significant and unavoidable.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing environmental conditions in the portions of the project area outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent, would emit the same air pollutants, and would potentially expose the same sensitive receptors. Therefore, the air quality impact would be the same, as described above. This determination is consistent with the PEIR.

Impact AQ-5

Use of vehicles and mechanical equipment during treatments could expose people to objectionable odors from diesel exhaust, which was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 37). SPRs applicable to this treatment are HAZ-1, NOI-4, and NOI-5. SPR HAZ-1 requires that all diesel and gasoline-powered equipment be properly maintained to comply with all state and federal emission requirements. With implementation of SPRs NOI-4 and NOI-5, treatment activities and staging areas would be located as far as possible from sensitive receptors, and equipment idling time would be restricted. This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment and duration of use, are consistent with those analyzed in the PEIR.

Inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing environmental conditions in the portions of the project area outside the treatable landscape are essentially the same because they are adjacent and the equipment emitting the odor would be the same. Therefore, the air quality impact would also be the same, as described above. This determination is consistent with the PEIR.

Impact AQ-6

Pile burning could expose people to objectionable odors from smoke from pile burning and was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 38). The duration and parameters of the pile burning are consistent with the activities addressed in the PEIR, and the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. The applicable SPRs for this treatment are AD-4, AQ-2, AQ-3, and AQ-6, as described above. The PEIR identifies the impact from smoke from prescribed burning (including pile burning) as significant and unavoidable. As examined in the PEIR, no additional mitigation measures are feasible, and the impact would remain significant and unavoidable. The impacts from the pile burning for the proposed project were not quantified but would fall within the finding of the PEIR of potentially significant and unavoidable.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental conditions in the portions of the project area outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent and the treatment (i.e., pile burning) would be the same. Therefore, the air quality impact would also be the same, as described above, and would fall within the finding of the PEIR—potentially significant and unavoidable—with implementation of the same SPRs. This determination would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope of the air quality cumulative impact analysis from the CalVTP PEIR is the air basins within the treatable landscape. In addition to the lands treated under the CalVTP PEIR, there are several similar past, present, and reasonably foreseeable projects that have affected and likely would affect the air basin within and surrounding the treatable landscape (CalVTP Final PEIR Section 4.4.3, page 4-13). Contributions of the proposed project would be consistent with the findings described in the PEIR—not cumulatively considerable for Impacts AQ-2, AQ-3, and AQ-5 and potentially cumulatively considerable for Impacts AQ-1, AQ-4, and AQ-6.

New Air Quality Impacts

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer

to Section 3.4.1 Regulatory Setting and Section 3.4.2 Environmental Setting in Volume II of the Final PEIR). The added acreage outside the treatment areas would not expand the total annual acreage proposed for treatment under the PEIR of 250,000 acres per year. Within the project area, the existing environmental and regulatory conditions pertinent to air quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent, the air basin is the same, and the treatment activities and associated air emissions would be the same. Therefore, the impacts would be the same and, for the reasons described above, impacts of the proposed project would be consistent with those covered in the PEIR. No circumstances would change, and the inclusion of areas outside of the CalVTP treatable landscape would not result in any new significant impact not addressed in the PEIR.

3.4 Archaeological, Historical, and Tribal Cultural Resources

3.4.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact CUL-1: Cause a substantial adverse change in the significance of built historical resources?	LTS	Impact CUL-1, pp. 3.5-14–3.5-15	yes	CUL-1, CUL-2, CUL-7, CUL-8	NA	LTS	no	yes
Impact CUL-2: Cause a substantial adverse change in the significance of unique archaeological resources or subsurface historical resources?	SU	Impact CUL-2, pp. 3.5-15–3.5-16	yes	CUL-1, CUL-2, CUL-3, CUL-4, CUL-5, CUL-6, CUL-8	CUL-2	LTSM	no	yes
Impact CUL-3: Cause a substantial adverse change in the significance of a tribal cultural resource?	LTS	Impact CUL-3, p. 3.5-17	yes	CUL-1, CUL-2, CUL-3, CUL-4, CUL-5, CUL-6, CUL-8	None	LTS	no	yes
Impact CUL-4: Disturb human remains?	LTS	Impact CUL-4, p. 3.5-18	yes	CUL-3, CUL-7	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New archaeological, historical, and tribal cultural resources impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.4.1 Discussion

Background

Consistent with SPR CUL-1, a records search of the proposed project area, including areas within and outside of the treatable landscaped, was performed by the North Central Information Center (NCIC) on October 23, 2024 (NCIC File No. NEV-24-73). Nevada County also shared the results of the records search conducted in 2019 (NEV-19-80) for the Phase I treatment area on September 10, 2024. In total, the records search identified four previously recorded cultural resources and one unrecorded cultural resource within the 0.25-mile buffer of the Phase I treatment area. The Phase II treatment area records search identified seven previously recorded cultural resources within the 0.25-mile buffer area. Additionally, one historic resource in the Phase II treatment area was not included in the original records search but was previously recorded by the Nevada County Historical Landmarks Commission. Of the five cultural resources identified in the Phase I treatment area, three consist of historic-era sites and two consist of precontact sites. All eight previously recorded cultural resources in the Phase II treatment area consistent of historic-era resources.

A cultural resources pedestrian survey of a portion of the proposed project was conducted on November 11 and December 3, 2024. The survey identified four new historic-era archaeological sites, one new historic-era site, and two previously identified sites were relocated and delineated for avoidance. One previously recorded resource was not relocated during the survey (ASM Affiliates 2025).

A site sensitivity analysis was prepared for the proposed project by ASM Affiliates to identify areas of high potential sensitivity for cultural resources. The records search results and sensitivity analysis are provided in the confidential cultural report (Attachment C). The surface site sensitivity assessment found that the Phase I treatment area is more likely to contain precontact sites, as the slope is less pronounced, and the sites are likely to be clustered adjacent to nearby creeks in level areas. Generally, the proposed project was determined to have low and very low buried site sensitivity. However, soils associated with mining activities and alluvial deposits are present in some Phase I treatment area locations and have a high buried site potential (ASM Affiliates 2025).

The Board of Forestry sent letters to 12 Native American tribes on February 9, 2019, notifying each that the PEIR was being prepared under CEQA, as required by California Public Resources Code section 21080.3.1. Four tribes requested initiation of tribal consultation. Tribal consultation has been completed with these tribes pursuant to California PRC section 21074. No tribal

cultural resources were identified during consultation conducted for the PEIR. SPR CUL-2 requires notification of any geographically affiliated Native American tribe(s). The project proponent sent letters to the Colfax-Todds Valley Consolidated Tribe, Nevada City Rancheria Nisenan Tribe, TSI-AKIM Maidu of the Taylorsville Rancheria, United Auburn Indian Community of the Auburn Rancheria, and Wilton Rancheria.

Impact CUL-1

Proposed treatment activities include manual treatments, ground-based mechanical treatments, herbicide application, and burning for biomass disposal. These activities have some potential to damage historical resources. Use of targeted herbicides and manual treatments would generally not damage potential historical resources because such resources could be avoided. The cultural resources records identified four new historic-era archaeological resources. There is a possibility that unrecorded cultural resources may be present at the surface within the proposed project areas that have been obscured by vegetation and development or in areas that were not subject to previous survey efforts, including historic-era archaeological sites. The potential for treatment activities to result in disturbance to, damage to, or destruction of built-environment structures, including those that have not yet been evaluated for historical significance, was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 3.5-14-3.5-15). SPR CUL-3 requires pre-field research prior to implementing treatments to identify any other structures that may be 50 years old or older, and SPR CUL-4 would require a site-specific survey by an archaeologically trained resource professional and/or qualified archaeologist. Structures (e.g., buildings, bridges, roadways) more than 50 years old, including potential historical resources that have not been evaluated for historical significance and are present in the treatment area, would be avoided pursuant to SPR CUL-7. No pile burning or mechanical treatment activities would occur within 100 feet of the built historical resource without consultation with, and receipt of written approval from, a qualified archaeologist. Buffers less than 100 feet for built historical resources would only be used after consultation with, and receipt of written approval from, a qualified archaeologist. All crew members and contractors implementing treatment activities would be trained in the protection of sensitive archaeological, historic, or tribal resources (SPR CUL-8). Impacts would be less than significant with the implementation of these measures.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, because the treatments inside and outside the treatable landscape are the same, and the records search was conducted for the overall project site plus a 0.25-mile buffer, the potential impact to historical resources is also the same, as described above, and would be less than significant with implementation of the SPRs. This determination is consistent with the PEIR.

Impact CUL-2

Vegetation treatments would include the use of heavy equipment, pile burning, and pulling of invasive understory species, which may result in soil disturbance. These treatment activities have the potential to result in inadvertent discovery of unique archaeological resources or subsurface historical resources, as discussed in the PEIR (CalVTP Final PEIR Volume II Section

3.5.3, pages 3.5-15–3.5-16). The site sensitivity analysis prepared for the proposed project (Attachment C) identified a low to very potential for buried archaeological sites within the overall proposed project area. However, there is high potential for buried archaeological sites in some Phase I treatment areas in soils associated with mining activities and alluvial deposits. The cultural records search revealed four new archaeological resources within the proposed project area. None of the archaeological resources have been evaluated for eligibility for listing in the NRHP or CRHR. The potential for these treatment activities to result in impacts to unique archaeological resources or subsurface historical resources was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, pages 3.5-15–3.5-16) and was found to be potentially significant and unavoidable in the PEIR. The impact would be less than significant for the proposed project with implementation of SPRs and mitigation and is within the scope of the PEIR.

Proposed treatments for the project would primarily involve very shallow soil disturbance, limiting the potential for effects. There is a potential for unknown unique archaeological resources or subsurface historical resources to be inadvertently damaged during treatment activities. SPRs CUL-1 through CUL-6 and CUL-8 would be implemented to minimize the risk of inadvertently damaging a previously unknown unique archaeological resource or subsurface historical resources during treatment activities. The following measures would be implemented in accordance with applicable SPRs:

- An archaeological and historical resource record search would be conducted (SPR CUL-1, already conducted for this PSA).
- All geographically affiliated Native American tribes would be contacted (SPR CUL-2, already conducted for this PSA); pre-field research would be conducted prior to treatment implementation (SPR CUL-3).
- A site-specific archaeological survey in areas with known cultural resources, areas identified as having high sensitivity for historic-era or buried resources where surveys were not conducted previously, or areas containing tribal cultural resources, as identified by any geographically affiliated tribe(s), would be conducted and archaeological resources treated, if needed (SPRs CUL-4 and CUL-5).
- Culturally affiliated tribes would be notified if cultural resources are identified within a treatment area and cannot be avoided (SPR CUL-6).
- All crew members and contractors implementing treatment activities would be trained in the protection of sensitive archaeological, historical, and tribal cultural resources (SPR CUL-8).

The proposed project would also implement MM CUL-2 to further reduce impacts to unknown unique archaeological or subsurface historical resources by ceasing all ground-disturbing activity within 100 feet of the discovery of any previously unknown resource until a qualified archaeologist or archaeologically trained resource professional assesses the significance of the find.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the potential for discovery of archaeological resources is essentially the same within and outside the treatable landscape because they are adjacent and have similar vegetation and historic use. Therefore, the potential impact to unique archaeological resources or subsurface historical resources is the same and would be less than significant. This determination is consistent with the PEIR.

Impact CUL-3

The Native American Heritage Commission (NAHC) was contacted on October28, 2024, to request a review of their Sacred Lands File for this project and list of individuals/groups who might have knowledge concerning cultural and tribal resources within the project area. The NAHC's response stated that there are no Native American sacred sites documented within the project area and provided a list of contacts in the Colfax-Todds Valley Consolidated Tribe, Nevada City Rancheria Nisenan Tribe, TSI-AKIM Maidu of the Taylorsville Rancheria, United Auburn Indian Community of the Auburn Rancheria, and Wilton Rancheria who could provide additional information about archaeological and/or tribal resources in the project area. Letters were sent on November 19, 2024, respectively, according to the NAHC list. The potential for the proposed treatment activities to cause a substantially adverse change in the significance of a tribal cultural resource during vegetation treatment was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 17). As explained in the PEIR, while tribal cultural resources may be identified within the treatable landscape during treatment activities, implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource. Specifically, SPR CUL-6 requires that the project proponent, in consultation with any culturally affiliated tribe(s), would develop effective protection measures for important tribal cultural resources identified by the tribe(s) to be located within treatment areas.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the tribal cultural affiliations present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to tribal cultural resources is also the same, as described above. SPRs applicable to this treatment include CUL-1 through CUL-6 and CUL-8. This determination is consistent with the PEIR.

Impact CUL-4

Initial and maintenance treatments would include manual treatments, ground-based mechanical treatments, and pile burning for biomass disposal which would result in ground-disturbing activities. The potential for treatment activities to uncover human remains was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 3.5-17) and found to be less than significant. The potential for human remains to be uncovered during the implementation of the treatment project would be minimal due to the nature of the work and the limited resultant ground disturbance from the types of activities proposed. The potential for treatment activities to uncover human remains was examined in the PEIR (CalVTP Final PEIR

Volume II Section 3.5.3, page 3.5-17) and found to be less than significant. The impact is within the scope of the PEIR because the treatment activities and the level of ground disturbance are consistent with those analyzed in the PEIR. Known cemeteries (historic era) would be identified per SPR CUL-3 and avoided per CUL-7 to ensure no significant impacts. Should human remains be encountered in the course of implementing the proposed project, as stated in the PEIR, compliance with the California Health and Safety Code sections 7050.5 and 7052 and PRC section 5097 would occur. In the event of discovery of human remains, no further disturbance or excavation of the site and the human remains would occur, and the site would be left undisturbed. Impacts would be less than significant.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the potential for discovery of human remains is essentially the same within and outside the treatable landscape because they are adjacent and have similar vegetation and historic use. Therefore, the potential impact to human remains is also the same as previously described and less than significant. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope of the archaeological, historical, and tribal cultural resources impact analysis from the CalVTP PEIR is the state of California. In addition to the lands treated under the CalVTP PEIR, there are several similar past, present, and reasonably foreseeable projects that have affected and likely would affect cultural resources, within and surrounding the treatable landscape, and cultural resources are considered nonrenewable members of finite classes (CalVTP Final PEIR Section 4.4.4, page 4-14 and Table 3 1). The proposed project would not constitute a cumulatively considerable contribution to an otherwise significant cumulative impact related to known unique archaeological resources, subsurface historical resources, built environment historical resources, or human remains.

New Archaeological, Historical, and Tribal Cultural Resource Impacts

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.5.1 Environmental Setting and Section 3.5.2 Regulatory Setting in Volume II of the Final PEIR). The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a changed circumstance to the geographic extent presented in the PEIR. However, within the project area, the existing environmental and regulatory conditions pertinent to archaeological, historical, or tribal cultural resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed project is consistent with the types of projects covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not constitute a new or substantially more severe significant

impact than what was included in the PEIR. Therefore, no new impact related to archaeological, historical, or tribal cultural resources or human remains would occur.

3.5 Biological Resources

3.5.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact BIO-1: Substantially affect special-status plant species either directly or through habitat modifications?	LTSM	Impact BIO-1, pp 3.6-131–3.6-138	yes	BIO-1, BIO-2, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HAZ-5	BIO-1a, BIO-1b	LTSM	no	yes
Impact BIO-2: Substantially affect special-status wildlife species either directly or through habitat modifications?	LTSM	Impact BIO-2, pp 3.6-138–3.6-184	yes	BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-9, BIO-10, BIO-12, HAZ-5, HAZ-6, HYD-1, HYD-2, HYD-4, HYD-5	BIO-2a, BIO-2b, BIO-2e, BIO-2g	LTSM	no	yes
Impact BIO-3: Substantially affect riparian habitat or other sensitive natural community through direct loss or degradation that leads to loss of habitat function?	LTSM	Impact BIO-3, pp 3.6-186–3.6-191	yes	BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-9, HYD-4	MM BIO-3a	LTSM	no	yes

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact BIO-4: Substantially affect state or federally protected wetlands?	LTSM	Impact BIO-4, pp 3.6-191–3.6-192	yes	BIO-3, BIO-4, HYD-1, HYD-2, HYD-4, HYD-5	MM BIO-4	LTSM	no	yes
Impact BIO-5: Interfere substantially with wildlife movement corridors or impede use of nurseries?	LTSM	Impact BIO-5, pp 3.6-192–3.6-196	yes	BIO-1, BIO-2, BIO-4, BIO-5, BIO-10, HYD-5	MM BIO-5	LTSM	no	yes
Impact BIO-6: Substantially reduce habitat or abundance of common wildlife?	LTS	Impact BIO-6, pp. 3.6-197–3.6-198	yes	BIO-1, BIO-2, BIO-12	NA	LTS	no	yes
Impact BIO-7: Conflict with local policies or ordinances protecting biological resources?	No Impact	Impact BIO-7, pp 3.6-198–3.6-199	yes	AD-3	NA	No impact	no	yes
Impact BIO-8: Conflict with the provisions of an adopted natural community conservation plan, habitat conservation plan, or other approved habitat plan?	No impact	Impact BIO-8, pp. 3.6-199–3.6-200	no	NA	NA	No impact	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New biological resource impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.5.2 Discussion

Baseline Studies

Field Surveys

Pursuant to SPR BIO-1, biologists from Stillwater Sciences performed a desktop review of project-specific biological resources and conducted a reconnaissance-level survey of the treatment areas. Reconnaissance-level surveys occurred on December 4 and 5, 2024, to identify and document sensitive natural communities, habitat types, and potential sensitive resources within the project area. During these surveys, habitat suitability determinations were made for the potential special-status plant and wildlife species listed in Attachment B.

Identification of Sensitive Habitats with Potential to Occur

Vegetation community types mapped by CalVeg using the existing California Wildlife Habitat Relationship (CWHR) classification scheme were reviewed against the available imagery in GIS (Stillwater Sciences 2025). Supplemental sources such as the National Wetlands Inventory, Soil Survey Geographic Database (SSURGO), and USGS data on substrates were used to determine habitats that may support a variety of biological resources (Stillwater Sciences 2025).

To determine the potential for sensitive natural communities to occur within the project area, the online Manual of California Vegetation was utilized to crosswalk CWHR vegetation types to the alliance level; any alliances listed as a sensitive natural community were reviewed for the characteristic species and membership rules and then compared to species observed in the field (Stillwater Sciences 2025). If the characteristic species of a sensitive natural communities were observed during the reconnaissance-level survey, that sensitive natural community was determined to have the potential to occur within the project area.

Identification of Listed Plant and Animal Species with Potential to Occur

Appendix Bio-3 (Northern California Coast Section 263A, Tables 9a, 9b, 10a, 10b, and 19) of the PEIR was reviewed for special-status plants and wildlife that could occur within the treatment areas. Species that clearly had no potential for occurrence (e.g., crustaceans, dune-dwelling species) were excluded from consideration.

During the reconnaissance-level surveys, habitats were evaluated for the potential to support the special-status plant species identified in the database queries (Stillwater Sciences 2025). The special-status wildlife species were reviewed including habitat requirements, known distribution, and location and date of recorded observations. During the reconnaissance-level survey, habitat types and features (e.g., burrows, large trees, nesting areas, stream hydrology) required by the special-status wildlife species identified from the database queries were

evaluated to determine the likelihood for each species to occur within the project area. General habitat conditions were photographed and evidence of wildlife activity (e.g., visual observations, scat, calls) was noted (Stillwater Sciences 2025).

Habitats and Sensitive Natural Communities Potentially Present

The project area is primarily dominated by Montane Hardwood (23.9%), Montane Hardwood-Conifer (21.8%), Ponderosa Pine (19.2%), and Mixed Chaparral (13.7%). The database query results indicated no sensitive natural communities had been previously documented within the project area. One sensitive natural community, Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii, macnabiana*] Woodland Alliance), which has a CDFW ranking of S3 (Vulnerable), was identified during the reconnaissance-level survey within the Closed-Cone Pine-Cypress habitat type. Habitat types found within the proposed project area along with acreages and percentages are listed below in Table 3-2.

Table 3-2 Habitat Types Mapped within the Project Footprint

Habitat type	Acreage	Percent cover mapped in project footprint
Annual Grassland	90.7	6.1%
Blue Oak-Foothill Pine	134.2	9.1%
Closed-Cone Pine-Cypress[a]	26.3	1.8%
Cropland	0.1	0.0%
Mixed Chaparral	203.4	13.7%
Montane Hardwood	354.5	23.9%
Montane Hardwood-Conifer	323.0	21.8%
Ponderosa Pine	284.9	19.2%
Urban	64.1	4.3%
Total	1,481.2	100.0%

Notes:

[a] The sensitive natural community Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii*, *macnabiana*] Woodland Alliance; S3) was observed within this habitat type.

Source: (Stillwater Sciences 2025)

Special-status Plants and Wildlife with Potential to Occur

Attachment B includes a compilation of special-status plant and wildlife species with potential to occur within the project area. Table 3-3 and Table 3-4 comprise the final list of special-status plant and wildlife species with potential to occur within the treatment area based on the data review and reconnaissance-level survey. Full tables, including species that were ruled out and the justification for doing so, are provided in Attachment B.

Table 3-3 Special-Status Wildlife with Potential to Occur within the Project Footprint

Species	Federal listing	State listing	Habitat	Potential for occurrence
Western bumble bee *Bombus occidentalis*	–	SCE	Forages on flowering plants in chaparral scrub, shrubby areas, open grasslands, forested openings, mountain meadows, and urban parks and gardens. Host plant genera include, but are not limited to, buckbrush (*Ceanothus* spp.), knapweed (*Centaurea* spp.), rabbitbrush (*Chrysothamnus* spp.), thistle (*Cirsium* spp.), wild buckwheat (*Eriogonum* spp.), geranium (*Geranium* spp.), gumweed (*Grindelia* spp.), lupine (*Lupinus* spp.), sweet clover (*Melilotus* spp.), wild mint (*Monardella* spp.), blackberry (*Rubus* spp.), goldenrod (*Solidago* spp.), and clover (*Trifolium* spp.). Nests underground in pre-existing cavities (abandoned small mammal burrows) but can also nest above ground in grass tussocks, brush piles, fallen logs, and human-made structures.	**Moderate**—see (Stillwater Sciences 2025)
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	–	Riparian and oak savanna habitats with host plant *Sambucus* sp. (blue elderberry)	**Low**. The proposed project area ranges in elevation from 1,973 to 2,493 feet, which is at the uppermost elevation limit for this species. In addition, the USFWS current range for the species does not overlap with the proposed project area; the current range is located about 7 miles to the west of the Project, and final critical habitat for the species is located about 45 miles south of the Project Area. The closest observation is from 2011 at about 22 miles from Project Area.

Species	Federal listing	State listing	Habitat	Potential for occurrence
Monarch butterfly *Danaus plexippus*	FPT	–	Adults forage on a variety of flowering plants during breeding and migration; larvae (caterpillars) require milkweed (*Asclepias* spp.) as a host plant. Overwintering roosts include eucalyptus (*Eucalyptus* sp.), Monterey pine (*Pinus radiata*), and Monterey cypress (*Cupressus macrocarpa*) trees.	**Moderate**— see (Stillwater Sciences 2025)
Western spadefoot *Spea hammondii*	FPT	SSC	Western spadefoot is found in California from near Redding south throughout the Central Valley and nearby foothills and through the Coast Ranges south of Monterey Bay. This species prefers areas with sparse vegetation and/or short grasses in sandy or gravelly soils, primarily in washes, river floodplains, alluvial fans, playas, and alkali flats. Spadefoots typically occur in grasslands, but they may also be found in valley-foothill hardwood woodlands, chaparral, or pine-oak woodlands.	**Low.** Phase 1 is outside of the known range of the species. While there were some lesser preferred habitat types present in Phase 2, the primary habitat types were lacking (washes, river floodplains, alluvial fans, playas, and alkali flats). Observation of juvenile from 2023 about 17 miles from the Project Area.
Foothill yellow-legged frog, North Sierra clade *Rana boylii*	–	ST	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate	**Moderate**— see (Stillwater Sciences 2025)
California red-legged frog *Rana draytonii*	FT	SSC	Breeds in still or slow-moving water with emergent and overhanging vegetation, including wetlands, wet meadows, ponds, lakes, and low-gradient, slow moving stream reaches with permanent pools; uses adjacent uplands for dispersal and summer retreat.	**Moderate**— see (Stillwater Sciences 2025)
Northwestern pond turtle *Actinemys marmorata*	FPT	SSC	Permanent, slow-moving fresh or brackish water with available basking sites and adjacent open habitats or forest for nesting.	**Moderate**— see (Stillwater Sciences 2025)

Species	Federal listing	State listing	Habitat	Potential for occurrence
Coast horned lizard *Phrynosoma blainvillii*	–	SSC	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants.	**Moderate**— see (Stillwater Sciences 2025)
Bald eagle *Haliaeetus leucocephalus*	FD, BGEPA	SE, SFP	Large bodies of water or rivers with abundant fish, uses snags or other perches; nests in advanced-successional conifer forest near open water.	**Moderate (flyover only)** — see (Stillwater Sciences 2025)
Northern harrier *Circus cyaneus*	–	SSC	Nests, forages, and roosts in wetlands or along rivers or lakes, but also in grasslands, meadows, or grain fields typically greater than 8 acres.	**Low.** While some upland clearings of grasslands and meadows are present in the proposed project area, they are not significant or large enough to support nesting or foraging for the species. The species was observed in 2015, about 2 miles from Project Area. The closest occurrence in CNDDB is from 2000 about 15 miles from the Project Area.
American goshawk *Accipter atricapillus*	–	SSC	Mature and old-growth stands of coniferous forest, and while found over a large range, they are more commonly found in middle and higher elevations (1,000–10,800 feet); nests in dense part of stands near an opening.	**Low.** Proposed project area is within the elevation range of the species. Nesting and foraging habitat is not likely as there is little to no mature or older stands of coniferous forest with open understory in proposed project area. The most recent observations of individuals were in 2024 about 12 to 13 miles from the proposed project area and, in 2017, about 5 to 6 miles from the proposed project area. The closest nest tree was observed in 1998, about 13 miles from the proposed project area.

Species	Federal listing	State listing	Habitat	Potential for occurrence
California black rail *Laterallus jamaicenis coturniculus*	–	ST, SFP	While large tidally influenced marshes with saline to brackish water is preferred for the species, due to habitat degradation across the state, the species have been known to move into freshwater marshes when the preferred tidally influenced habitat is not present. Vegetation associations include pickleweed (*Salicornia virginica*), bulrush (*Schoenoplectus* spp.), cattail (*Typha* spp.), or rushes (*Juncus* spp.); peripheral vegetation at and above mean high higher water necessary to protect nesting birds during extremely high tides. Nests are set on or close to the ground.	**Low.** While cattails and bulrush along ponds are present within the Project Area, the potential to support breeding habitat for the species is low. The species was documented within the proposed project area in 2009 and has been observed in 2023 at a grid cell about 5 miles from the proposed project area (the exact location of the sensitive species is not provided and only shown on a grid-cell level).
California spotted owl *Strix occidentalis occidentalis*	FPE or FPT	SSC	Typically in older forested habitats; nests in complex stands dominated by conifers, especially coastal redwood, with hardwood understories; some open areas are important for foraging.	**Low**. Nesting and foraging habitat is not likely as there is little to no mature or older stands of coniferous forest in proposed project area. The closest activity center (best known location of a nest site) to Phase 1 is NEV0080, which includes young observed in 2016 about 2.5 miles east of the proposed project area. The closest activity center to Phase 2 is a pair (NEV0074) observed in 2008 about 4.5 miles east of the Project.

Species	Federal listing	State listing	Habitat	Potential for occurrence
Great gray owl *Strix nebulosa*	–	SE	Dense, coniferous forest, usually near a meadow for foraging; nests in large, broken-topped snags	**Low**. While some habitat features such as snags and coniferous forest adjacent to meadows were present within the proposed project area, they were few in number and not large in size. Additionally, the proposed project area is about 500 feet below the preferred elevation range for the species. Data provided in eBird shows that this species has been observed in 2024 at a grid cell about 1.3 miles east of the proposed project area and higher in elevation (the exact location of the sensitive species is not provided and only shown on a grid-cell level. The closest observation in CNDDB is from 2010 about 15 miles away from proposed project area.
Long-eared owl *Asio otus*	–	SSC	Riparian habitat; nests in dense vegetation close to open grassland, meadows, riparian, or wetland areas for foraging	**Moderate**— see (Stillwater Sciences 2025)
Bank swallow *Riparia riparia*	–	ST	Nests in vertical bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam.	**Low**. There is no suitable nesting habitat within the proposed project area. The closest observation is from 2020, about 8 miles from proposed project area. The most recent CNDDB occurrence is from 2008, about 16 miles from the proposed project area.
Yellow warbler *Setophaga petechia*	–	SSC	Deciduous riparian woodland with an open canopy and close to water, along streams or wet meadows	**High**— see (Stillwater Sciences 2025)
Yellow-breasted chat *Icteria virens*	–	SSC	Early-successional riparian habitats with a dense shrub layer and an open canopy	**Moderate**— see (Stillwater Sciences 2025)

Species	Federal listing	State listing	Habitat	Potential for occurrence
Grasshopper sparrow *Ammodramus savannarum*	–	SSC	Typically found in moderately open grasslands with scattered shrubs.	**Moderate**— see (Stillwater Sciences 2025)
Numerous other bird species protected by the Migratory Bird Treaty Act (MBTA)	MBTA	–	Variable including, but not limited to, grasses, shrubs, and trees	**High**— see (Stillwater Sciences 2025)
Western red bat *Lasiurus frantzii*	–	SSC	Roosts in foliage, primarily in riparian trees, such as sycamores and cottonwoods, while less in shrubs; woodlands near streams, fields and orchards; feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands	**Moderate**— see (Stillwater Sciences 2025)
Townsend's big-eared bat *Corynorhinus townsendii*	–	SSC	Roosts in cavities, most often in tunnels, caves, mines, and buildings, but also rock shelters, preferentially close to water; forages in the riparian zone and along creeks and river drainages.	**Moderate**— see (Stillwater Sciences 2025)
Fisher, Southern Sierra Nevada DPS *Pekania pekanti*	FE	ST, SSC	Dense advanced-successional conifer forests, with complex forest structure; den in hollow trees and snags	**Low.** The habitat is not suitable to support this species. There is little to no dense advanced-successional conifer forests present within the proposed project area, which is dominated by oak woodlands and chaparral. Some hollow trees and snags present. Critical habitat for this species is located about 140 miles south of the proposed project area. The closest and most recent observation is from 1987, about 9 miles from the proposed project area.

Notes:

Federal

FE: federally listed as endangered under the federal Endangered Species Act (ESA)

FT: federally listed as threatened under the federal ESA

FPE: federally proposed as endangered

FPT: federally proposed as threatened

FD: federally delisted

BGEPA: federally protected under the Bald and Golden Eagle Protection Act

MBTA: Migratory Bird Treaty Act

State

SE: listed as endangered under the California Endangered Species Act (CESA)

ST: listed as threatened under the CESA

SCE: state candidate for listing as endangered

SSC: California State (CDFW) Species of Special Concern

SFW: CDFW fully protected species

Source: (Stillwater Sciences 2025)

Table 3-4 Special-Status Plant Species with Potential to Occur within the Project Footprint

Species	Federal listing	State listing	CNPS	Habitat	Potential for occurrence
Spicate calycadenia (*Calycadenia spicata*)	-	-	1B.3	Dry disturbed areas, openings, or roadsides with adobe, clay, gravelly or rocky soils in cismontane woodland and valley and foothill grassland	Yes, previously documented within the Project Area
Stebbins' morning–glory (*Calystegia stebbinsii*)	FE	CE	1B.1	Openings in chapparal and cismontane woodland, sometimes in gabbroic seeps	Yes, previously documented within the Project Area
Sierra arching sedge (*Carex cyrtostachya*)	-	-	1B.2	Mesic lower montane coniferous forest, marshes and swamps, meadows and seeps, and the margins of riparian forest	Yes, suitable habitat may be present within the Project Area
Chaparral sedge (*Carex xerophila*)	-	-	1B.2	Gabbroic and serpentine areas in chaparral, cismontane woodland, and lower montane coniferous forest	Yes, previously documented within the Project Area
Red Hills soaproot (*Chlorogalum grandiflorum*)	-	-	1B.2	Gabbroic and serpentine soils in chaparral, cismontane woodland, and lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area
Mosquin's clarkia (*Clarkia mosquinii*)	-	-	1B.1	Roadsides and rocky areas in cismontane woodland and lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area
Pine Hill flannelbush (*Fremontodendron decumbens*)	FE	CR	1B.2	Rocky areas in chaparral and cismontane woodland, sometimes gabbroic and serpentine soils.	Yes, previously documented within the Project Area
Finger rush (*Juncus digitatus*)	-	-	1B.1	Openings in cismontane woodland, openings in lower montane coniferous forest, and xeric vernal pools	Yes, suitable habitat may be present within the Project Area
Cantelow's Lewisia (*Lewisia cantelovii*)	—	—	1B.2	Granitic and mesic areas as well as sometimes serpentine soils in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest	Yes, suitable habitat may be present within the proposed project area.

Species	Federal listing	State listing	CNPS	Habitat	Potential for occurrence
Inundated bog–clubmoss (*Lycopodiella inundata*)	—	—	2B.2	Coastal bogs and fens, mesic lower montane coniferous forest, and lake margins of marshes and swamps	Yes, suitable habitat may be present within the proposed project area.
Shevock's copper moss (*Mielichhoferia shevockii*)	—	—	1B.2	Mesic, metamorphic, and rocky areas of cismontane woodland	Yes, suitable habitat may be present within the proposed project area.
Layne's ragwort (*Packera layneae*)	FT	CR	1B.2	Rocky areas in chaparral and cismontane woodland, sometimes gabbroic and serpentine soils	Yes, suitable habitat may be present within the proposed project area.
Sierra blue grass (*Poa sierrae*)	—	—	1B.3	Openings in lower montane coniferous forest	Yes, suitable habitat may be present within the proposed project area.
Sticky pyrrocoma (*Pyrrocoma lucida*)	—	—	1B.2	Areas with alkaline or clay soils in Great Basin scrub, lower montane coniferous forest, and meadows and seeps	No, suitable habitat (alkaline clay) is not present within the proposed project area.
Brownish beaked–rush (*Rhynchospora capitellata*)	—	—	2B.2	Mesic areas of lower montane coniferous forest, marshes and swamps, meadows and seeps, and upper montane coniferous forest	Yes, suitable habitat may be present within the proposed project area.
Scadden Flat checkerbloom (*Sidalcea stipularis*)	—	CE	1B.1	Montane freshwater marshes and swamps	Yes, previously documented within the Project Area
Oval–leaved viburnum (*Viburnum ellipticum*)	—	—	2B.3	Chaparral, cismontane woodland, and lower montane coniferous forest	Yes, suitable habitat may be present within the proposed project area.

Notes:

FE: federally listed as endangered

FT: federally listed as threatened

CE: California listed as endangered

CR: California listed as rare

CNPS: California Native Plant Society Ranks

- 1B; plant species rare or endangered in California and elsewhere (not protected under ESA or CESA)
- 2B: plant species rare, threatened, or endangered in California, but more common elsewhere
- 0.1: seriously threatened in California (over 80 percent of occurrences threatened; high degree and immediacy of threat)
- 0.2: moderately threatened in California (20 percent to 80 percent of occurrences are threatened; moderate degree and immediacy of threat)
- 0.3: not threatened in California (low degree/immediacy of threats or no current threats known)

Source: (Stillwater Sciences 2025)Impact BIO-1

Impact BIO-1

The proposed project would involve development and maintenance of a fuel break through use of manual treatments, ground-based mechanical treatments, and targeted herbicide application as well as biomass disposal, including pile burning that could result in direct or indirect adverse effects to special-status plant species. The project area contains known occurrences of sensitive plant species as well as potentially suitable habitat for some sensitive plant species (see Table 3-4). The potential for adverse effects to special-status plant species is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance resulting from implementing treatment activities are consistent with those analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 3.6-131–3.6-138).

Mechanical treatment and herbicide application may directly or indirectly impact special-status species; however, the removal of understory vegetation and invasive species would promote the regeneration of native species that support a healthier residual forest, and this effort was designed to reduce the risk of catastrophic stand-replace wildfires, which may threaten known sensitive plant populations.

Applicable SPRs include the following:

- Biological resources will be reviewed and surveyed (SPR BIO-1).
- Crew members and contractors will be trained on applicable biological resources (SPR BIO-2).
- Protocol-level surveys for special-status plants will occur in areas identified during SPR BIO-1 as suitable habitat for special-status plant species where adverse effects from the proposed project cannot be clearly avoided (SPR BIO-7). Protocol-level surveys for special-status plants will not be required if adverse effects can be clearly avoided such as the target special-status plant species is a herbaceous annual, stump-sprouting species, or geophyte species, and if the treatment may be carried out during the dormant season for that species or when the species has completed its annual life cycle, provided the treatment will not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment or destroy seeds, stumps, or roots, rhizomes, bulbs, and other underground parts of special-status plants.
- Invasive-species spread will be prevented (SPR BIO-9).
- Disturbance will be suspended during heavy precipitation (SPR GEO-1).
- Soil areas disturbed by mechanical, prescribed herbivory, and prescribed (pile) burns that exhibit bare soil over 50 percent or more of the treatment area will be stabilized with mulch or organic matter produced from mastication (SPR GEO-3).
- Erosion will be monitored by the project proponent through an inspection for proper implementation of applicable SPRs and mitigations prior to the rainy season, and an inspection will be conducted of the treated areas for evidence of erosion after the first large storm or rainfall event (SPR GEO-4).
- Compacted treatment areas will be drained via water breaks (SPR GEO-5).

- Erosion will be minimized through heavy equipment and slope limitations (SPR GEO-7).
- Herbicide application will not occur within protective buffers for special-status plants to prevent drift and non-target application (SPR HAZ-5).

In addition, MMs BIO-1a and BIO-1b would be required when the following conditions are met:

- Where sensitive species are known to occur
- When treatments cannot be completed in the dormant season
- When treatments would be implemented during the growing period of sensitive annual and geophyte species
- Where protocol-level surveys are required (per SPR BIO-7) and special-status plants are identified during these surveys

Impacts could be potentially significant, even with implementation of the SPRs, per the CalVTP PEIR. Per MMs BIO-1a and BIO-1b, if special-status plants are identified during protocol-level surveys, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which mechanical treatment and manual treatment would not occur unless a qualified biologist determines that the species would benefit from treatment in the occupied habitat area. With implementation of this mitigation, impacts would be less than significant.

An analysis of potential impacts from various treatment activities on each special-status plant species that may occur has been performed (Attachment B). With implementation of the SPRs and MMs listed above, including survey protocols and preoperational meetings, impacts to special-status plant species would be less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, general habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected outside the treatable landscape that would not also be similarly affected within the treatable landscape). Therefore, the potential impact on special-status plants is also the same, as described above, and less than significant with mitigation and with implementation of the same SPRs. This determination is consistent with the PEIR.

Impact BIO-2

Summary of Impacts and Relevant SPRs and MMs

Manual and mechanical vegetation removal, prescribed pile burning, and targeted herbicide application have the potential to result in direct or indirect adverse effects to special-status wildlife species or habitat. The project area contains potentially suitable habitat for thirteen sensitive wildlife species (see Table 3-3). The impact is within the scope of the PEIR because the treatment activities and intensity are consistent with those analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 3.6-138–3.6-184).

The potential for adverse effects to special-status wildlife species is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance resulting from treatment activities are consistent with those analyzed in the PEIR. Hand and mechanical treatments, pile burning, and targeted herbicide application would result in reduced understory vegetation that may modify preferred habitats for some species; however, it would promote a healthier, native residual forest habitat. SPRs BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-9, BIO-10, BIO-11, HAZ-5, HAZ-6, HYD-1, HYD-2, HYD-4, and HYD-5 would be implemented to minimize impacts.

Applicable SPRs not already described under Impact BIO-1 are as follows:

- If sensitive natural communities or habitats are present and adverse effects cannot be avoided, then a protocol-level survey will be conducted to identify and map the limits of the potentially sensitive area (SPR BIO-3).
- Treatments will be designed to avoid loss or degradation of riparian habitat function, including retaining a minimum of 75-percent overstory and 50-percent understory canopy (SPR BIO-4).
- Type conversion will be avoided and habitat function in chaparral and coastal sage scrub communities maintained through treatment design, and a minimum of 35-percent relative cover of native chaparral and coastal sage scrub communities will be retained (SPR BIO-5).
- The project will not conflict with the provisions of an adopted natural community conservation plan, habitat conservation plan, or other approved plan.
- Focused or protocol-level surveys will be conducted for special-status wildlife species or nursery sites with potential to be directly or indirectly affected by treatments (SPR BIO-10).
- Install wildlife fencing, which is designed to minimize the chance of wildlife entanglement, allows for wildlife jump-outs, and is highly visible to wildlife (SPR BIO-11).
- Protect common nesting birds, including raptors, by scheduling treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site (SPR BIO-12)
- Obtain all required licensing and permitting for herbicide application through the Nevada County Agricultural Commissioner's office (SPR HAZ-6).
- Comply with water quality regulations including vegetation- and land-disturbance-related Waste Discharge Requirements (SPR HYD-1).
- Avoid construction of new roads (SPR HYD-2).
- Identify and protect watercourse and lake protection zones (SPR HYD-4).
- Protect non-target vegetation and special-status species from herbicides (SPR HYD-5).
- Prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities (HAZ-5)

In addition, MMs BIO-2a, BIO-2b, BIO-2e, and 2g would be required when the following conditions are met:

- Where California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (SPR BIO-1) or focused or protocol level surveys (SPR BIO-10)
- If other special-status wildlife species are observed during reconnaissance surveys or focused protocol-level surveys
- If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIIO-1 and confirmed during protocol-level surveys per SPR BIO-10
- If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1

According to the CNDDB search and reconnaissance-level surveys (Stillwater Sciences 2025), thirteen special-status wildlife species have a moderate-to-high potential to occur within the treatment area (see Table 3-3). Three of the 13 special-status wildlife species are listed under the federal ESA or CESA, two are proposed for ESA listing, and one is a candidate for CESA listing.

Pursuant to SPR HAZ-5, a Spill Prevention and Response Plan (SPRP) would be created prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. Implementation of SPR HAZ-6 and SPR HYD-5 would ensure all necessary licenses, permits, and safety measures would be obtained prior to herbicide use. Treatment prescriptions would be designed to protect soil stability. Water and Lake Protection Zones (WLPZs) protection would be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits would be removed immediately. Per SPR HYD-4, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within WLPZs to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes where necessary to protect beneficial uses of water from Project activities.

Special-status Amphibians/Reptiles

Four of the 13 special-status animals are amphibians or reptiles: foothill yellow-legged frog, North Sierra clade (*Rana boylii*), California red-legged frog (*Rana draytonii*), northwestern pond turtle (*Actinemys marmorata*), and coast horned lizard (*Phrynosoma blainvilii*). Foothill yellow-legged frog habitat could occur along Deer Creek and Squirrel Creek as well as in intermittent streams in the treatment area. California red-legged frog could occur in ponds or slow-moving water courses in the treatment area and are known to use uplands adjacent to streams for dispersal. Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams and lakes would be implemented. At least 75 percent of surface cover and undisturbed area would be retained within the WLPZ. Also, 50 percent of the understory canopy of native

riparian vegetation would be retained pursuant to SPR BIO-3. Northwestern pond turtle (*Actinemys marmorata*) habitat can be found within the treatment area, with Deer Creek providing potential basking and migration habitat. Habitat adjacent to ponds in the treatment area includes open and forested habitats, which may support nesting. Coast horned lizard habitat in the treatment area includes the Annual Grassland, Mixed Chaparral, and Montane Hardwood-Conifer habitat types with open areas and patches of loose soil. The potential for treatment activities, including maintenance treatments, to result in adverse effects on special-status amphibians and reptiles was examined in the PEIR.

Since treatment activities would not occur within aquatic habitat, instream habitat function for foothill yellow-legged frog, California red-legged frog, and Northwestern pond turtle would be maintained. Pursuant to SPR HYD-4, treatments within stream WLPZs adjacent to the treatment area would be limited (e.g., no mechanical treatment, retention of at least 75 percent surface cover). The Project would typically pull any material out of the WLPZs prior to chipping to reduce chips remaining within the WLPZs. Pursuant to SPR BIO-4, treatments in riparian habitats would be designed to retain or improve habitat functions by implementing the following:

- Treatments would be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region.
- Treatments would retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat, as identified and mapped during surveys conducted through SPR BIO-3.
- Treatments would be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region.
- Treatments would avoid vegetation removal that could reduce stream shading and increase stream temperatures.

For upland habitats that may be occupied by coast horned lizard or used as dispersal habitat for California red-legged frog or nesting habitat for Northwestern pod turtle, implementation of SPR BIO-2 would require biological resource training for workers, and SPR BIO-10 would require protocol-level surveys for special-status animals in areas identified during SPR BIO-1 as suitable habitat for special-status wildlife species where adverse effects from the proposed project cannot be clearly avoided.

Under mitigation measures BIO-2a and BIO-2b, biological monitoring would be implemented, treatment areas would be flagged to avoid work near special-status species and their habitats, and/or other measures recommended by a qualified RPF or biologist as necessary to avoid

injury to or mortality of these species. The project proponent may consult with CDFW for technical information regarding appropriate measures to avoid and minimize impacts. If full implementation of mitigation measure BIO-2a and BIO-2b are not feasible, avoidance measures would be implemented. If avoidance measures are not feasible, mitigation measure BIO-2c would be implemented. Pursuant to SPR BIO-3, treatments would retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys. With the implementation of SPRs and mitigation measures, impacts would be less than significant and consistent with the PEIR.

Special-status Insects

Two special-status insects have the potential to occur in the Project area: western bumble bee (*Bombus occidentalis*), and Monarch butterfly (*Danaus plexippus plexippus*) (see Table 3-3)) Western bumble bee is candidate endangered under CESA. The monarch butterfly is proposed for listing as threatened under ESA.

Bumble bees have three basic habitat requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. The proposed project area may contain habitat suitable for bumble bee nesting and overwintering as well as floral resources. Treatment activities, including manual treatments, mechanical treatments, prescribed burning, and herbicide application could result in temporary removal of floral resources as well as inadvertent destruction of bumble bee nests or overwintering sites through trampling, crushing, or removal of nesting or overwintering substrate (e.g., downed woody debris). The potential for treatment activities to result in adverse effects on special-status bumble bees was examined in the PEIR.

Per SPR BIO-1, if it is determined that adverse effects on special-status bumble bees can be clearly avoided by conducting treatments outside of a season of sensitivity (e.g., flight season) or physically avoiding habitat for these species, then mitigation would not be required. Adverse effects on special-status bumble bees would be clearly avoided if a limited operating period from May 15 to August 31 would be implemented for mechanical treatment or prescribed burning in meadows, if feasible. If the limited operating period is determined to be infeasible, then SPR BIO-10 would be implemented, and focused surveys would be conducted for western bumble bees or monarch butterflies. For western bumble bee the project proponent would implement and follow Survey Considerations for CESA Candidate Bumble Bees released by CDFW in June 2023 (CDFW 2023). If focused surveys are conducted and monarchs are not detected, then further mitigation for the species would not be required. If monarch butterflies are detected during focused surveys, or are assumed to be present, then mitigation measure BIO-2e would be implemented. Under mitigation measure BIO-2e, several measures would be implemented to reduce the likelihood of mortality, injury, or disturbance to monarchs and to maintain habitat function. These measures include retention of host plants (milkweed spp.) and conducting treatments in a patchy pattern to retain floral resources and provide refuge for butterflies. If western bumble bees are found in the Project area, mitigation measure BIO-2g

would be implemented. With the implementation of SPRs and mitigation measures, impacts to special-status insects would be less than significant and consistent with the PEIR.

Special-status Bats

Two special-status bats have the potential to occur in the Project area: Townsend's big-eared bat (*Corynorhinus townsendii*) and western red bat (*Lasiurus frantzii*) (see Table 3-3), and roosting habitat may be present in the treatment area.

Treatment activities, including mechanical treatments, manual treatments, and prescribed burning conducted within habitat suitable for bats during the bat maternity season (May 1–August 31) could disturb active bat roosts from auditory and visual stimuli (e.g., heavy equipment, chainsaws, vehicles, personnel) or smoke (e.g., prescribed burning), potentially resulting in abandonment of the roost and loss of young. During roosting season, habitat suitable for bat would be avoided. Herbicide treatments that would occur away from established roads would be limited to ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems, and would be conducted by crews of 1 to 5 people; thus, these treatments would not result in substantial disturbance to special-status bat roosts. The potential for treatment activities to result in adverse effects on special-status bats was examined in the PEIR. If implementation of mechanical treatments, manual treatments, or prescribed burning were to occur during the bat maternity season, then SPR BIO-10 would apply, and focused surveys for these species would be conducted by a qualified RPF or biologist prior to treatment implementation. Because habitat suitable for bat roosting would be avoided and SPR BIO-10 would be implemented, impacts would be less than significant under CEQA.

Special-status, Migratory, and Nesting Birds

Five special-status bird species have potential to occur in the Project area (see Table 3-3) and nesting habitat may be present in the treatment area. Project treatments would not result in the conversion of nesting habitat to non-nesting habitat. Project treatments would be designed to avoid the breeding season to the maximum extent feasible. Per SPR BIO-10 and BIO-12, if treatment activities must occur during the breeding season, then protocol-level surveys would be conducted and applicable mitigation measures BIO-2a through BIO-2c would be implemented.

Treatment activities, including mechanical treatments, manual treatments, prescribed burning, and herbicide application conducted during the nesting bird season could result in direct loss of active nests if trees or shrubs containing nests are removed or burned. For nests within vegetation that would not be removed, treatment activities including mechanical treatments, manual treatments, prescribed burning, and herbicide application could result in disturbance to active nests from auditory and visual stimulus (e.g., heavy equipment, chain saws, vehicles, personnel), potentially resulting in abandonment and loss of eggs or young. The potential for treatment activities to result in adverse effects on special-status birds was examined in the PEIR.

Per SPR BIO-1, if adverse effects on suitable nesting habitat for special-status birds can be clearly avoided by physically avoiding the habitat or conducting treatments outside of the

season of sensitivity (i.e., nesting bird season), then no mitigation would be required. Treatments that occur outside of the nesting bird season (February 1–September 15) would avoid adverse effects on nesting special-status birds. If conducting treatments outside of the nesting bird season is infeasible, then SPR BIO-10 would apply, and focused nesting bird surveys would be conducted prior to implementation of treatment activities. If no active bird nests are observed during nesting bird surveys, then additional avoidance measures for these species would not be required. If active bird nests for fully protected and/or ESA/CESA special-status bird species are observed during focused surveys, then mitigation measures BIO-2a and BIO-2b would be implemented for the following species: bald eagle (*Haliaeetus leucocephalus*), long-eared owl (*Asio otus*), yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), and grasshopper sparrow (*Ammodramus savannarum*). If the above-mentioned mitigation measures are not feasible, then avoidance measures would be implemented. If avoidance measures are not feasible, mitigation measure BIO-2c would be implemented.

Under mitigation measures BIO-2a and BIO-2b, a no-disturbance buffer of 660 feet would be implemented for bald eagle nests. For all remaining special-status species, CDFW recommends that a qualified biologist establish buffer distances based on site- and species-specific information including, but not limited to, species sensitivity to noise and visual disturbance, vegetation cover, topography, and nest location. Additionally, trees containing bald eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act.

Treatment activities would not result in removal of trees (i.e., conifers, hardwoods) or snags greater than 10 inches dbh; therefore, habitat function for special-status birds would be maintained because larger trees, and the cover they provide, are commonly used by these species. Pursuant to mitigation measure BIO-2a, this determination for bald eagle must be made in consultation with CDFW. Therefore, if mitigation measure BIO-2a is required for treatment activities, the project proponent would contact CDFW to seek technical input on the determination so that habitat function would be maintained for bald eagle. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe impact than what was covered in the PEIR.

If conducting treatments outside of the nesting bird season is determined to be infeasible, then SPR BIO-12 would apply, and focused nesting bird surveys would be conducted for all common bird species, including raptors, by a qualified RPF or biologist prior to treatment implementation. If no active bird nests are observed during focused surveys, then additional avoidance measures would not be required. If active special-status bird nests are observed during focused surveys, then mitigation measures BIO-2a would be implemented for bald eagle. The project proponent would also follow Fish and Game Code sections 3503 and 3503.5, which state it is unlawful to take, possess, or destroy the nest or eggs of any bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Pursuant to SPR HYD-4, treatments within riparian habitats, which often provide nesting habitat for species such as the yellow warbler, would be limited to no mechanical treatment and retention of at least 75 percent surface cover. Nesting habitat for some special-status bird species

may include grasslands (such as grasshopper sparrow [*Ammodramus savannarum*] and long-eared owl [*Asio otus*]) and montane and coniferous forest. Treatment activities would not occur in these habitats if active nests were present; thus, this nesting habitat would not be removed or modified. Pursuant to mitigation measure BIO-2a, the final determination for habitat function maintenance for bald eagle must be made by the project proponent in consultation with CDFW. Therefore, if mitigation measure BIO-2a is required for treatment activities, the project proponent would contact CDFW to seek technical input on the determination that habitat function would be maintained for bald eagle. With the implementation of SPRs and mitigation measures, impacts to special status, nesting, and migratory birds would be less than significant with mitigation and consistent with the PEIR.

Impact BIO-3

Summary of Impacts and Relevant SPRs and MMs

Manual and mechanical vegetation removal, pile burning, and targeted herbicide application could result in direct or indirect adverse effects to riparian habitat, oak woodlands, or other sensitive natural communities, including designated sensitive natural communities. The project areas contain one sensitive habitat type, but no statewide critically imperiled or imperiled (S1 or S2) communities were documented during the desktop or field review of the project area (Stillwater 2025). The potential for treatment activities to result in adverse effects to sensitive habitats was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 71). The potential for adverse effects to sensitive habitats is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and level of disturbance as a result of the treatment activities are consistent with those analyzed in the PEIR. The SPRs that apply to this impact are SPRs BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-9, and HYD-4.

The following SPR not already described in Impact BIO-1 and Impact BIO-2 applies to the proposed project:

- Treatment will be implemented to minimize soil disturbance and prevent the spread of plant pathogens, including *Phytopthora* spp. (SPR BIO-6).

SPR BIO-3 requires a survey for sensitive vegetation communities prior to treatment to ensure these are identified and treatment avoids these communities. Implementation of SPR BIO-1 and the survey required under SPR BIO-3 would ensure any riparian habitat, sensitive communities, or oak woodlands would be identified. If any riparian habitat occurs, SPR BIO-4 would ensure that treatment is designed to avoid or minimize impacts to these areas. SPR BIO-5 would ensure that treatment is designed to maintain or enhance habitat function of chaparral and coastal sage scrub communities; SPR BIO-6 requires that best management practices be employed to avoid spread of plant pathogens; and SPR BIO-9 prescribes actions to prevent the spread of invasive plants. In addition, MM BIO-3a would be required where sensitive natural communities are known to occur.

Impacts could be potentially significant, even with implementation of the SPRs, per the CalVTP PEIR. Per MM BIO-3a, if sensitive natural communities are identified during pre-treatment

surveys, treatments would be designed to avoid loss of sensitive natural communities by restoring the appropriate natural fire regime using prescribed burning, ensuring fuel breaks are not created in sensitive natural communities with rarity ranks of S1 or S2, and, for sensitive natural communities with a rarity rank of S3, installing only shaded fuel breaks within 20 percent of less of the stand of sensitive natural community vegetation.

Review of the Stillwater Sciences habitat data demonstrated the presence of one habitat type designated as sensitive by CDFW, which is part of the Closed-cone Pine-Cypress habitat type (Stillwater Sciences 2025). The S3 sensitive natural community is Ultramafic Cypress (*Hesperocyparis* [*sargentii, macnabiana*] Woodland Alliance). This sensitive natural community is contained within the Closed-cone Pine-Cypress habitat type, which represents a total of approximately 1.8 percent of the project footprint. Mixed Chaparral habitat was found to be present in the project footprint, but none of the scrub Alliances identified within the project area are designated as sensitive natural communities by CDFW (Stillwater Sciences 2025). Effects to each of the sensitive natural communities are described in further detail below.

Ultramafic Cypress Woodland

The treatment area contains Closed-cone Pine-Cypress habitat type, which contains Ultramafic Cypress (*Hesperocyparis* [*sargentii, macnabiana*] Woodland Alliance. Overall, Closed-cone Pine-Cypress habitat type comprises approximately 1.8 percent, or 26.3 acres of the project area. Tree cover in the Closed-cone Pine-Cypress habitat type was generally patchy to moderate, dominated by the native tree McNab cypress (*Hesperocyparis macnabiana*). Given that McNab cypress was the dominant species observed during the reconnaissance-level survey, the habitat type mapped as Closed-Cone Pine-Cypress would correspond in part or in whole to Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii, macnabiana*]) Woodland Alliance, which is a sensitive natural community with a CDFW ranking of S3 (Vulnerable); a comprehensive survey would need to be conducted to confirm the extent of this alliance within the project area. McNab cypress is a fire-dependent conifer species; cones require fire and/or significant heat or desiccation to open and release seeds, which germinate best on bare mineral soil. Trees begin bearing cones by approximately 10 years of age; therefore, a fire return interval of no less than 15 years is necessary to maintain stands (Stillwater Sciences 2025). An age classification of the stands within the project area was not conducted during the reconnaissance-level survey; however, in stands that were visited it was observed that the trees were of reproductive age and bearing cones.

Implementation of SPR-9 would ensure no significant spread of invasive species. Impacts to this community would be less than significant, consistent with the PEIR. Due to the sensitivity of this community, impacts could still be significant, depending on intensity of treatments. With implementation of MM BIO-3a, treatment within the Ultramafic Cypress Woodland sensitive natural community would target understory vegetation, and at least 80 percent of the native-vegetation upper canopy cover would be maintained. In treatment areas where multiple age classes are represented, the proposed treatment would promote heterogeneity, resiliency, and health in the residual stand by creating different influences of sunlight through the canopy to the forest floor, adding to a mosaic of diversity in the understory. Treatment would generally

focus on vegetative understory, removal of invasive species, removal of dead and dying vegetation, and removal of small-diameter (less than 10 inches dbh), fire-hazardous trees. In cypress stands, trees less than 2 inches in diameter as well as dead and down woody debris would be removed. Treatment focus on vegetative understory would ensure retention overall of the Ultramafic Cypress Woodland sensitive natural community; therefore, loss of Ultramafic Cypress Woodland is not anticipated. Impacts would be less than significant with mitigation and consistent with the PEIR.

Riparian Habitat

The treatment area includes several intermittent to perennial creeks and occasional human-made ponds that were too narrow or small to be detected by mapping completed by CalVeg (Stillwater Sciences 2025); these areas generally supported a narrow band or ring of species that differed from the larger habitat types in which they occurred. The immediate vicinity around these aquatic habitats included native riparian tree species (e.g., Fremont cottonwood [*Populus fremontii* subsp. *Fremontii*], red willow [*Salix laevigata*], and arroyo willow [*Salix lasiolepis*]) as well as some upland trees (e.g., interior live oak [*Quercus wislizeni*] and incense cedar [*Calocedrus decurrens*]), often with low to moderate cover of nonnative Himalayan blackberry (*Rubus armeniacus*) in the shrub layer.

Forest management activities, including manual and mechanical vegetation removal, pile burning, and targeted herbicide application that occur within the riparian corridor, could result in direct or indirect adverse effects to riparian habitat. Implementation of SPR BIO-4 would ensure that treatment is designed to avoid loss or degradation of riparian habitat function. Treatments would be designed to retain canopy cover and native vegetation, focus on removal of dead or dying vegetation, and minimize removal of large, native riparian hardwood trees. SPR BIO-4 would also minimize ground disturbance, fell trees away from waterbodies, and limit herbicide use to hand application of herbicides approved for use in aquatic environments during dry periods. With the implementation of SPR BIO-4, impacts would be less than significant to riparian habitat, and consistent with the PEIR.

Impacts of the Proposed Project Outside the Treatable Landscape and Biomass Treatments

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, general habitat characteristics are essentially the same within and outside the treatable landscape because the areas are all adjacent, and the same sensitive natural communities are found in both. Therefore, the potential impact on sensitive natural communities is also the same, as described above, and would be less than significant with implementation of the previously identified SPRs and mitigation. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-4

Mechanical and hand treatments, pile burning, and targeted herbicide application have the potential to adversely impact wetlands and state protected riparian habitats if work occurs in

these areas. The treatment activities and their potential to impact wetlands was assessed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 193). Impacts to riparian communities as a sensitive natural community is described under Impact BIO-3. Wetland habitat and riparian corridors have the potential to occur in the treatment area, and several streams were observed during reconnaissance surveys. Maps of stream areas are shown on Figure 1 in Attachment B. Removal of invasive species through mechanical and manual methods would be beneficial as it would allow revegetation by native wetland and riparian species. Vegetation removal (primarily invasive species removal) within riparian habitat may necessitate a 1602 permit from CDFW. No fill or discharge of fill material into waters of the U.S. would occur as part of the proposed project. Work can also generate erosion that can influence wetland and State protected riparian habitats. Implementation of water quality protections in accordance with SPR HYD-1, identification of Watercourse and Lake Protection Zones (WLPZs) in accordance with SPR HYD-4, and delineation and avoidance of State and federally protected wetlands, per MM BIO-4, would ensure no impacts to wetlands in the identified features. In addition, SPR BIO-1 would be implemented where reconnaissance surveys have not been conducted, and the above-mentioned measures would be implemented, as needed. SPR BIO-9 would minimize potential for invasive species spread in protected wetlands and riparian areas. With implementation of the SPRs and the mitigation measure described above, impacts to State and federally protected wetlands and riparian corridors from the proposed project would be less than significant with mitigation incorporated. The proposed treatment activities are therefore within the scope of the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, general habitat characteristics are essentially the same within and outside the treatable landscape because the areas are all adjacent and include the same types of wetlands and riparian habitat. Therefore, the potential impact on wetlands is also the same, and the same SPRs and mitigation would apply to ensure less-than-significant effects, as previously described above. This determination is consistent with the PEIR.

Impact BIO-5

Mechanical and hand treatments could result in some limited direct or indirect adverse effects on wildlife corridors and nurseries. The treatment areas have the potential to provide essential connectivity areas for sensitive species. However, no known wildlife nursery sites or indications of nursery sites, such as deer-fawning habitat or potential rookery trees with whitewash, were identified within the project area during the reconnaissance survey. Habitat within the treatment area may be used for movement (e.g., Northwestern pond turtle) and protective cover for common wildlife species. Noise during work may impede some movement, but the treatment areas are generally within a close proximity to residences where other human disturbances are typical. Tree removal with heavy equipment and ground-disturbing activities have the potential to impact nursery sites for native wildlife. Use of noise-generating equipment could disturb roosting birds and bats, impeding use of nursery sites. These impacts were found

to be within the scope of the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 193), and treatment activities proposed are consistent with those analyzed in the PEIR.

The SPRs that apply to this impact are SPRs BIO-1, BIO-2, BIO-4, BIO-5, BIO-10, BIO-11, and HYD-5, which are described under Impact BIO-1 and Impact BIO-2. With implementation of the SPRs, areas of intact wildlife corridors would be retained. Existing habitat would remain to permit movement of wildlife species. Vegetation management activities would not block or obstruct streams or creeks. SPR BIO-10 would generally apply to many areas where special-status species could occur. Wildlife nursery sites could still be significantly impacted if not avoided. If wildlife nursery sites are identified during surveys conducted pursuant to SPR BIO-10, MM BIO-5 would apply. This mitigation measure requires that nursery habitat be marked for avoidance during treatment activities and a non-disturbance buffer be installed around the nursery site if activities are required to occur while the site is active or occupied. Impacts to migratory corridors and nursery sites would be less than significant with implementation of mitigation, consistent with the PEIR.

Implementation of the SPRs and mitigation measure listed above would minimize changes in habitat function within treatment areas that serve as wildlife-movement corridors. The proposed treatment activities are therefore within the scope of the PEIR because they are the same as those listed in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the proposed project treatment area, general habitat characteristics are essentially the same within and outside the treatable landscape because the areas are all adjacent, the vegetation is the same or similar, and the same wildlife species would use the areas as wildlife movement corridors. From the species' perspective, there would be no difference between the areas within and outside the treatable landscape. Therefore, the potential impact on wildlife movement corridors is also the same, as described above—less than significant with incorporation of the same SPRs and mitigation. This determination is consistent with the PEIR.

Impact BIO-6

The proposed project could result in direct and indirect impacts to common wildlife, including nesting birds. The various habitats that occur within the project site support a variety of common wildlife, including nesting birds. Treatments could alter habitat for many common wildlife, such as nesting birds or woodrats, which could impact these species. Based on review and survey of project-specific biological resources (SPR BIO-1), suitable habitat for common wildlife species, including nesting birds, is present within the treatment area. In addition, suitable habitat in the project area was verified to be present for listed bird species (see Table 3-3). All treatment activities, including manual treatment and limbing of oaks and pines, mechanical treatment, and pile burning, if conducted during the nesting bird season (approximately February 1 to July 31 in the region), could result in direct loss of active bird nests or in disturbance of nesting birds from noise and presence of personnel and equipment

that could disrupt nesting activities and cause nest abandonment and failure. The potential for treatment activities to result in adverse effects to habitat and abundance of common wildlife was addressed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 3.6-197 – 3.6-198). The potential for adverse effects to common wildlife, including nesting birds, is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and level of disturbance are consistent with those analyzed in the PEIR. The implementation of SPRs BIO-1, BIO-2, and BIO-12 would reduce the risk of the proposed project, resulting in less-than-significant adverse effects to habitat and the abundance of common wildlife.

The following SPR not described in Impact BIO-1 through Impact BIO-5 is applicable to the proposed project:

- If active nesting season avoidance is not feasible, nesting bird surveys shall be conducted, and active nests shall be buffered and avoided (SPR BIO-12).

Extensive areas of similar habitat occur adjacent to the proposed fuel break and WUI areas, such that substantial similar habitats would remain in surrounding areas that are available to common wildlife species during and after treatment. In addition, implementation of SPR BIO-1, SPR BIO-2, SPR BIO-3, and SPR BIO-5 would limit the loss and degradation of high-quality habitat for common species within the project site. SPR BIO-2 would require worker training in sensitive biological resources. SPR BIO-3 would ensure mapping of sensitive habitats; SPR BIO-5 would result in avoidance of type-conversion in scrub habitats. Therefore, project treatment would remove vegetation and alter habitat structure locally but would not result in permanent habitat degradation or conversion. Overall diversity and abundance of common birds and other wildlife would not substantially change in the long term. Per SPR BIO-12, treatment activities would be scheduled to avoid active nesting season of common nesting bird and raptor species. The active nesting season would be defined by a qualified RPF or biologist. If treatment activities cannot be scheduled to fully avoid the active nesting season, a survey for common nesting birds would be conducted by a qualified RPF or biologist, as described in SPR BIO-12. If an active nest is detected, disturbance to the nest would be avoided by establishing an appropriate buffer around the nest, modifying treatments to avoid disturbance to the nest, or deferring treatment until the nest is no longer active. The implementation of the SPRs listed above would ensure that any impact to nesting birds and common wildlife would be less than significant. The treatment activities are consistent with those analyzed in the PEIR and would therefore be within the scope of the PEIR. With the implementation of the applicable SPRs, any impact to the loss of habitat or abundance of wildlife, including nesting birds, would be less than significant, consistent with the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, general habitat characteristics are essentially the same within and outside the treatable landscape because the areas are all adjacent, the vegetation is the same or similar, and the same nesting bird species would use the areas. Therefore, the potential impact to common wildlife, including nesting birds, is also the same, as described

above—less than significant with the implementation of the same SPRs. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-7

Local policies or ordinances may apply to resources that occur within the proposed project area, particularly tree ordinances or noise ordinances. The potential for treatment activities to result in conflict with local policies or ordinances was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3 page 3.6-199). The potential for the proposed project to conflict with local policies or ordinances is within the scope of the activities and impacts addressed in the PEIR because the treatment projects implemented under the CalVTP are required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures related to protection of biological resources. Additionally, SPR AD-3 (Consistency with Local Plans, Policies, and Ordinances) requires that the project proponent design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans), policies, and ordinances to the extent the project is subject to them. See Section 3.11 for more information. Impacts would be less than significant and consistent with the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, general habitat characteristics are essentially the same within and outside the treatable landscape, and the applicable county, city, and local policies are the same because the lands inside and outside the CalVTP treatable landscape are within the same jurisdictions. Therefore, the potential impact on applicable local plans, policies, and ordinances is also the same, with the same SPRs, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-8

The CalVTP recognized four Habitat Conservation Plans (HCPs) and Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) in the Sierra Nevada Foothills Section (CalVTP Final PEIR Volume II Section 3.6, page 3.6-68). The proposed project area, including the areas outside the treatable landscape, does not fall within the boundaries of any of the HCPs or HCP/NCCPs. The proposed project does not fall under the jurisdiction of any known HCP or HCP/NCCP; therefore, this impact does not apply to the treatment areas.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the approximately 20.3-million-acre treatable landscape. While the addendum for this proposed project would add an additional 181 acres outside the treatable landscape, the acreage is expected to fall within the total 250,000-acre allowable impact covered by the PEIR. The geographic scope for biological resources includes the treatable landscape as well as adjacent migration and movement corridors that are connected to the treatable

landscape as well as the full geographic ranges of the special-status species and sensitive natural communities that occur within the treatable landscape (CalVTP Final PEIR Section 4.4.5, page 4-15 – 4-18). Because the proposed project area falls outside the treatable landscape are proximate to the treatable landscape, they fall within the geographic scope identified within the PEIR. As noted in the PEIR cumulative section, SPRs would reduce the likelihood and magnitude of many potential adverse effects on biological resources; however, impacts would not be avoided entirely, and the cumulative impact analysis considers the residual cumulative impacts to biological resources. The PEIR recognizes a cumulative significant impact to special-status plants, special-status wildlife, sensitive natural communities, wetlands, wildlife movement corridors, and common native wildlife (CalVTP Final PEIR Section 4.4.5, page 4-15 to 4-18). The proposed project's contribution to these cumulative impacts, however, would be consistent with the analysis in the PEIR and, with implementation of SPRs and mitigation measures, the contribution of the proposed project would be less than cumulatively considerable since impacts would largely be temporary or avoided through implementation of these measures.

New Biological Resource Impacts

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed project have been considered and found to be consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.6.1 Environmental Setting and Section 3.6.2 Regulatory Setting in Volume II of the Final PEIR). The project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to biological resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as described above. Therefore, the impacts of the proposed treatment project are also consistent with those considered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to biological resources would occur that is not covered in the PEIR.

3.6 Geology, Soils, Paleontology, and Mineral Resources

3.6.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact GEO-1: Result in substantial erosion or loss of topsoil?	LTS	Impact GEO-1, pp. 3.7-26–3.7-29	yes	AD-3, AQ-3, AQ-4, GEO-1 through GEO-8, and HYD-4.	NA	LTS	no	yes
Impact GEO-2: Increase risk of landslide?	LTS	Impact GEO-2, pp. 3.7-29–3.7-30	yes	AD-3, AQ-3, GEO-1 through GEO-8.	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New geology, soils, paleontology, and mineral resources impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.6.2 Discussion

Impact GEO-1

The proposed project area is located in the western foothills of Nevada County within the Sierra Nevada Range, a geologic block approximately 400 miles long that extends in a north-south band along the eastern portion of California (Nevada County 1995). The western foothills are generally comprised of metavolcanic and granitic formations (Nevada County 1995).

Most of the project area is underlain by Secca-Rock outcrop complex (2 percent to 50 percent slopes) as well as Boomer rock outcrop complex (5 percent to 15 percent slopes), Alluvial land, Sites very stony loam (15 to 50 percent slopes), and Sites silt loam (15 to 30 percent slopes) (NRCS 2024). The erosion factor of a soil indicates the susceptibility of a soil to sheet and rill erosion by water. The soil erosion factor for the Secca-Rock outcrop complex is 0.20,[3] indicating the soil is low to moderately susceptible to detachment, which can produce low to moderate runoff (NRCS 2024).

Project treatments could potentially leave loose soil exposed to the erosive forces of rainfall and high winds, which would increase the potential for soil erosion and loss of topsoil. A Slope Analysis was completed for the project. Approximately 99 percent of the Phase I maintenance area and 90 percent of the Phase II treatment area are located on slopes between 0 and 35 percent. Less than 1 percent of the total project area occurs on slopes greater than 50 percent. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance, which could lead to substantial erosion or loss of topsoil, especially in areas of steep slopes. Additionally, manual treatment such as extensive hand pulling of vegetation could also cause soil disturbance. Prescribed (pile) burning could increase risk of water repellency under the burn area as well as the breakdown of soil structure, which could lead to localized increases in erosion.

The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.7.3, pages 3.7-26–3.7-29) and was

[3] Soil erosion factor (K) is one of six factors used in the *universal soil loss equation* (USLE) and the *revised universal soil loss equation* (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

determined to be less than significant with implementation of SPRs. SPR AD-3 requires that the treatment design be consistent with local plans, policies, and ordinances. Implementation of SPRs AQ-3 and AQ-4 requires a burn plan to be designed and implemented and for dust minimization during treatments. SPRs GEO-1 through GEO-8 require the suspension of ground disturbance during heavy precipitation, limits on use of high-ground-pressure vehicles, stabilization of disturbed soil areas, erosion monitoring, use of water breaks where appropriate, minimization of burn-pile size, and treatments on slopes greater than 50 percent (5 acres of the Project) to be evaluated by an RPF or geologist to determine the necessary measures to minimize effects. Under SPR GEO-7, areas with slopes of greater than 65 percent (1 acre), and greater than 50 percent (5 acres) where erosion hazard rating is high or extreme, use of mechanical equipment would not be allowed, and any work performed would be at the discretion of fuel and vegetation management specialists and an RPF or geologist, as required under SPR GEO-8. These SPRs would avoid and minimize the risk of substantial erosion and loss of topsoil and, thereby, ensure the impacts are less than significant, consistent with the PEIR findings.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. The impacts of erosion and loss of topsoil for the areas outside the treatable landscape are within the scope of the PEIR because the soil characteristics of the project area are essentially the same within and outside the CalVTP treatable landscape due to adjacency and similar soil and geology types. Therefore, the potential impact related to soil erosion would be the same, as described above, and would be less than significant with implementation of the same SPRs. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact GEO-2

The term *landslide* refers to the downslope movement of materials such as rock, soil, or fill under the direct influence of gravity. This downward movement can occur along a surface (e.g., glide plane, landslide plane, discrete slip surface) or without a distinct failure surface. Topography, climate, geology, and hydrology are all contributing factors to slope instability and landslide hazards. Most of Nevada County is underlain with bedrock and lacks the characteristics contributing to landslide susceptibility (Nevada County 1995). The project area is mapped in low to moderate landslide susceptibility areas (CDOC 2011).

The potential for treatment activities to increase landslide risk was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.7.3, page 3.7-29-3.7-30) and was found to be less than significant with implementation of SPRs AD-3, AQ-3, and GEO-1 through GEO-8, described under Impact GEO-1. These SPRs would avoid and minimize the risk of landslide and, thereby, ensure the impacts are less than significant. This determination is consistent with the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing environmental conditions are the same as those within the treatable landscape because

of the proximity and shared slope conditions; therefore, the potential impact related to landslide risk is also the same, as previously described, and would be less than significant with the implementation of the same SPRs.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope for geology and soils is all areas where vegetation could be treated in California's geomorphic provinces (CalVTP Final PEIR Section 4.4.6, page 4-18). As noted in the CalVTP PEIR, cumulative impacts associated with erosion and landslide related to wildfire would be more significant in areas not managed with vegetation treatment programs. Therefore, the proposed project's contribution to soil erosion or an increased risk of landslide would not be cumulatively considerable and would be consistent with the analysis in the PEIR.

New Geology, Soils, Paleontology, and Mineral Resource Impacts

The proposed project would be consistent with the treatment types and activities considered in the CalVTP PEIR. Within the boundary of the project area, the geology and slopes of the areas outside of the treatable landscape are essentially the same as those in the treatable landscape; thus, the impacts would be the same. There are no changed circumstances present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. No new impacts or substantially more severe significant impact than what was covered in the PEIR would occur from the additional biomass processing methods. Therefore, no new impacts related to geology and soils would occur.

3.7 Greenhouse Gas Emissions

3.7.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact GHG-1: Conflict with applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?	LTS	Impact GHG-1, pp. 3.8-10–3.8-11	yes	None	NA	LTS	no	yes
Impact GHG-2: Generate GHG emissions through treatment activities?	PSU	Impact GHG-2, pp. 3.8-11–3.8-17	yes	AQ-3	GHG-2	PSU	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New greenhouse gas impacts: Would the treatment result in other impacts to greenhouse gases that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.7.2 Discussion

Impact GHG-1

Vegetation treatments would involve manual and mechanical vegetation removal, and biomass disposal would include chipping and pile burning, all of which would generate some greenhouse gas (GHG) emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.8.3, pages 3.8-10–3.8-11). The project would be consistent with the applicable policies, plans, and regulations to reduce GHG emissions as described in California's 2017 Climate Change Scoping Plan (California Air Resources Board 2017), the California Forest Carbon Plan (California Air Resources Board 2018), and the Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (CARB 2019). The City of Grass Valley has an adopted Energy Action Plan that provides an analysis of energy use within the city and establishes a plan for improving energy efficiency (City of Grass Valley 2018). Nevada County does not have an adopted Energy Action Plan. Impacts related to GHG emissions from these types of treatment activities are within the scope of the PEIR because the proposed activities as well as the associated equipment, duration of use, and resultant GHG emissions are consistent with those analyzed in the PEIR, which were found to be less than significant. SPR GHG-1 is not applicable to the proposed project because the project is not a registered offset project.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the same plans, policies, and regulations adopted to reduce GHG emissions apply in the areas outside the treatable landscape as well as in areas within the treatable landscape; therefore, the GHG impact is also the same—less than significant.

Impact GHG-2

Use of vehicles and mechanical equipment and prescribed burning (pile burning) during initial and maintenance treatments would result in GHG emissions. However, vegetation treatment would have relatively low GHG emissions compared to GHG emissions from catastrophic wildfires. Wildfire hazards, including wildfire intensity and rate of spread could be somewhat reduced through implementation of the proposed project. The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.8.3, page 11–17). This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment and duration of use, and the intent of the treatments to reduce wildfire risk and GHG emissions related to wildfire are consistent with

those analyzed in the PEIR. MM GHG-2 would be implemented and would reduce GHG emissions associated with pile burning by burning when fuels have a higher fuel moisture content, reducing the total area burned by mosaic burning and isolating and leaving large fuels unburned and by scheduling burns before new fuels appear. Treatment activities would contribute to annual GHG emissions generated under the CalVTP, and this impact would fall within the finding of the PEIR of potentially significant and unavoidable. Methods for reducing GHG emissions from pile burning would be integrated into SPR AQ-3 (Burn Plan) as described in MM GHG-2.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, greenhouse gas emissions and associated climate change impacts are global in nature and are not contained within the boundary of the treatable areas. Therefore, the GHG impact is also the same, as described above. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in CalVTP Final PEIR Section 4.4.7, because climate change is a global phenomenon, the cumulative context of this impact comprises all past, present, and reasonably foreseeable projects in the world, including GHG emission sources and carbon sinks. No single project alone would measurably contribute to an incremental change in the global average temperature or to the global climate, local climates, or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

New Impacts Related to GHG Emissions

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.8.1 Regulatory Setting and Section 3.8.2 Environmental Setting in Volume II of the Final PEIR). The same plans, policies, and regulations adopted to reduce GHG emissions apply in the areas outside the treatable landscape as within it. Likewise, the climate conditions are the same within the treatable landscape as they are just outside of it for this project. Therefore, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. No new impact related to GHG emissions would occur.

3.8 Energy Resources

3.8.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact ENG-1: result in wasteful, inefficient, or unnecessary consumption of energy?	LTS	Impact ENG-1, pp. 3.9-7–3.9-8	yes	NA	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New energy impacts: Would the treatment result in other impacts to energy that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion

3.8.2 Discussion

Impact ENG-1

The use of work vehicles, hauling vehicles, and mechanical equipment (e.g., masticators, chain saws, chippers) to implement the proposed project would result in the consumption of energy in the form of fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.9.3, pages 3.9-7–3.9-8) and was found to be a less-than-significant impact. The consumption of energy during implementation of the project treatments is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the PEIR. There are no SPRs applicable to this impact, and the impact would be less than significant, as consistent with the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental and regulatory conditions are essentially the same within and outside the treatable landscape, and the types of treatment activities and associated use of energy are of the same scale and scope as analyzed in the PEIR; therefore, the energy impact is also the same. No SPRs are applicable to this impact. This determination is consistent with the PEIR.

Cumulative Impact

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the approximately 20.3-million-acre treatable landscape. The inclusion of treatment outside the treatable landscape would expand the geographic scope for the cumulative analysis but as noted in the CalVTP PEIR, cumulative energy impacts are less than significant and would not produce additional electricity or natural gas demand that would trigger additional infrastructure. Therefore, the proposed project's contribution to energy use would not be cumulatively considerable and would be consistent with the analysis in the PEIR.

New Energy Resource Impacts

The project proponent has considered the site-specific characteristics of the proposed treatment project both inside and outside the treatable landscape and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.9.1 Regulatory Setting and Section 3.9.2 Environmental Setting in Volume II of the Final PEIR). Therefore, the impacts of the proposed project are consistent with those considered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to energy resources would occur.

3.9 Hazardous Materials, Public Health, and Safety

3.9.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact HAZ-1: Create a significant health hazard from the use of hazardous materials?	LTS	Impact HAZ-1, pp. 3.10-14–3.10-15	yes	HAZ-1, HAZ-2	NA	LTS	no	yes
Impact HAZ-2: Create a significant health hazard from the use of herbicides?	LTS	Impact HAZ-2, pp. 3.10-15–3.10-18	yes	HAZ 5 through HAZ-9	NA	LTS	no	yes
Impact HAZ-3: Expose the public or environment to significant hazards from disturbance to known hazardous material sites?	PS	Impact HAZ-3, pp. 3.10-18–3.10-19	yes	NA	HAZ-3	LTSM	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New hazardous materials, public health, and safety Impacts: Would the treatment result in other impacts to hazardous materials, public health, and safety that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.9.2 Discussion

Impact HAZ-1

Initial and maintenance treatments would include manual and mechanical treatments, pile burning, and targeted herbicide application, which may utilize hazardous materials, including fuels, oils, and lubricants as well as accelerant. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, pages 3.10-14–3.10-15). This impact is within the scope of the PEIR because the types of treatments and associated equipment (Dennis 2002) and types of hazardous materials that would be used are consistent with those analyzed in the PEIR and would be less than significant. Equipment and vehicles used for treatment would require fuels and lubricants that could cause a health hazard if accidentally released into the environment. All equipment would comply with SPR HAZ-1 to minimize leakages and ensure proper equipment maintenance. In accordance with SPR HAZ-2, all mechanical hand tools would be equipped with spark arrestors to minimize any potential ignitions. Herbicide application impacts are discussed under Impact HAZ-2, below.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the exposure potential and regulatory conditions are essentially the same within and outside the treatable landscape because the equipment would be the same, the methods to minimize exposure would be the same, and the areas are adjacent. Therefore, the hazardous material impact would be the same, as described above. The proposed project would result in a less-than-significant impact related to the use of hazardous materials, and the project would not result in impacts that would be more severe than those evaluated in the PEIR.

Impact HAZ-2

Initial and maintenance treatments would include targeted stump and spot spray herbicide treatments to kill or prevent regrowth of invasive and non-native species. No aerial spraying of herbicides would occur. The potential for treatment activities to cause a significant health hazard from the use of herbicides was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, pages 3.10-15–3.10-18). This impact is within the scope of the PEIR because the types of herbicides and application methods that would be used, which are limited to ground-based applications, would be consistent with those analyzed in the PEIR. Targeted herbicides would be applied by licensed applicators in compliance with all laws, regulations, and herbicide label instructions. The herbicides proposed under the PEIR have low levels of toxicity for humans (CalVTP Final PEIR Volume II Section 3.10.3 Table 3.10-1, pages 3.10-16–3.10-17).

Potential impacts associated with creating a health hazard would be less than significant. The proposed project would incorporate SPRs HAZ-5 through HAZ-9, which require the following: preparation of a Spill Prevention and Response Plan (SPR HAZ-5), compliance with all herbicide applications (SPR HAZ-6), triple-rinsing herbicide containers and proper herbicide disposal (SPR HAZ-7), employing techniques during application to minimize drift (SPR HAZ-8), and placing signage within 500 feet of areas receiving herbicide treatment (SPR HAZ-9). This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the exposure potential is essentially the same within and outside the treatable landscape because the herbicide types, application methods, and licensed applicators would be the same, and the locations and potential receptors are adjacent. Therefore, the hazardous materials impact would be the same, and less than significant, as described above.

Impact HAZ-3

The initial and maintenance treatments would include mechanical treatments and pile burning that would disturb soils and could expose workers, the public, or the environment to hazardous material if a contaminated site were present within the project area. The potential for workers participating in treatment activities to encounter contamination that could expose them or the environment to hazardous materials was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, pages 3.10-18–3.10-19). This impact was identified as potentially significant in the PEIR because hazardous materials sites could be present within project area, and soil disturbance or burning in those areas could expose people or the environment to hazards. MM HAZ-3 requires review of the DTSC EnviroStor and Cortese List to determine if any sites known to have previously used, stored, or disposed of hazardous materials are present and to avoid known sites. For the PSA, the EnviroStor and Cortese List were reviewed, and two closed leaking underground storage tank (LUST) contamination sites were found within the project area (DTSC n.d.; SWRCB n.d.). With implementation of MM HAZ-3, the impact would be less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. No hazards were identified on EnviroStor or the Cortese List in the locations outside the treatment areas, and they are adjacent and similar in previous use and potential contaminants to the project area. Therefore, the hazardous materials impact would be the same, as described above. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope for hazardous materials is the 250,000 acres of treatable land annually and the surrounding areas

(CalVTP Final PEIR Section 4.4.9, page 4-20). Therefore, the proposed project would be within the geographic scope of the cumulative analysis. Contributions of the proposed project would be the same within the treatable landscape as outside the treatable landscape, and the cumulative hazardous materials impact analysis would remain the same as described in the PEIR—not cumulatively considerable for Impacts HAZ-1, HAZ-2, and HAZ-3.

New Hazardous Materials, Public Health, and Safety Impacts

The site-specific characteristics of the proposed project both inside and outside the treatable landscape would be consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.10.2 Regulatory Setting and Section 3.10.3 Environmental Setting in Volume II of the Final PEIR). The impacts of the proposed project would be consistent with those considered in the PEIR. No circumstances would be changed, and the inclusion of areas outside of the CalVTP treatable landscape would not result in any new significant impacts. Therefore, no new impact related to hazardous materials would occur.

3.10 Hydrology and Water Quality

3.10.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact HYD-1: Violate water quality standards or waste discharge requirements, substantially degrade surface or ground water quality, or conflict with or obstruct the implementation of a water quality control plan through the implementation of prescribed burning?	LTS	Impact HYD-1, pp. 3.11-25–3.11-27	yes	AD-3, AQ-3, GEO-4 through GEO-8 HYD-1, HYD-4, HYD-6	NA	LTS	no	yes
Impact HYD-2: Violate water quality standards or waste discharge requirements, substantially degrade surface or ground water quality, or conflict with or obstruct the implementation of a water quality control plan through the implementation of manual or mechanical treatment activities?	LTS	Impact HYD-2, pp. 3.11-27–3.11-29	yes	AD-3, HYD-1, HYD-2, HYD-4, HYD-5, HYD-6, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-7, GEO-8, BIO-1, BIO-4, BIO-5, HAZ-1	NA	LTS	no	yes

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact HYD-3: Violate water quality standards or waste discharge requirements, substantially degrade surface or ground water quality, or conflict with or obstruct the implementation of a water quality control plan through prescribed herbivory?	LTS	Impact HYD-3, p. 3.11-29	yes	AD-3, BIO-1, BIO-3 BIO-4, BIO-5, GEO-1, GEO-4, GEO-7, HYD-1, HYD-2, HYD-4, HYD-5, HYD-6, and HAZ-1	NA	LTS	no	yes
Impact HYD-4: Violate water quality standards or waste discharge requirements, substantially degrade surface or ground water quality, or conflict with or obstruct the implementation of a water quality control plan through the ground application of herbicides?	LST	Impact HYD-4, pp. 3.11-30–3.11-31	yes	AD-3, BIO-1, BIO-4, BIO-5, GEO-1, GEO-7, HAZ-1, HAZ-5, HAZ-7, HYD-1, HYD-4, HYD-5, and HYD-6	NA	LTS	no	yes
Impact HYD-5: Substantially alter the existing drainage pattern of a treatment site or area?	LST	Impact HYD-5, p. 3.11-31	yes	AD-3, BIO-4, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, HYD-1, HYD-2, HYD-4, and HYD-6	NA	LST	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New hydrology and water quality impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.10.2 Discussion

Impact HYD-1

The project area is within the southern portion of the Sacramento River hydrologic region, primarily within the Bear River and Yuba River watersheds. The Sacramento River hydrologic region receives an average of approximately 53 inches of precipitation a year. The Bear River watershed is approximately 300 square miles and located between the Yuba River watershed to the north and the American watershed to the south (Sacramento River Watershed Program, n.d.-a). Average annual precipitation in the Bear River watershed ranges from 25 inches in the lower watershed to 45 inches in the upper watershed. The Bear River watershed is managed for water conveyance for agriculture and hydropower development (Sacramento River Watershed Program, n.d.-a). The Yuba River watershed extends from Donner Pass on the western slope of the Sierra Nevada's to the Feather River near Yuba City. The Yuba River watershed covers approximately 1,340 square miles and precipitation ranges from 20 inches in the lower watershed to 80 inches in the upper watershed. Three major tributaries flow into the Yuba River: North Yuba, Middle Yuba, and South Yuba Rivers (Sacramento River Watershed Program, n.d.-b). Hydrographic features are shown in Figure 1 of Attachment B. Intermittent drainages occur throughout the project site that capture rainfall in winter and spring but are likely dry in the summer months. These drainages could eventually reach nearby surface waters or groundwater.

The proposed project would include pile burning. The potential for burning to generate ash and exposed soil from the burned areas that result in runoff and cause violations of water quality regulations or degrade water quality was examined in the PEIR and was found to be a less-than-significant impact (CalVTP Final PEIR Volume II Section 3.11.3, pages 3.11-25–3.11-27). This impact is within the scope of the PEIR and is consistent with the impacts analyzed in the PEIR. Pile burning would entail burning cut vegetation material and would be conducted in select areas, depending upon access and site conditions. Suitable treatment areas for pile burning are typically flat or with gentle slopes and have open areas away from tree canopies and power lines. Areas selected would be those away from waterways, pursuant to SPR HYD-4. Pile burning would be conducted in compliance with CAL FIRE regulations and Northern Sierra Air Quality Management District (NSAQMD) Regulation III for open outdoor burning and burn-day restrictions. SPRs applicable to this treatment are AD-3, AQ-3, GEO-4 through GEO-8, HYD-1, HYD-4, and HYD-6. SPR AD-3 requires that the treatment design be consistent with local plans, policies, and ordinances, and SPR AQ-3 requires a burn plan. SPRs GEO-4 through GEO-8 require erosion monitoring, draining stormwater with water breaks where appropriate, minimizing burn pile size, and that all slopes greater than 50 percent be evaluated

by an RPF or geologist. SPRs HYD-1, HYD-4, and HYD-6 ensure that the treatments comply with the water quality regulations, watercourse protection zones be identified, burn piles be located outside of *watercourse and lake protection zones* (WLPZs) ranging from 50 to 150 feet as required around any waterways, and existing drainage systems be protected. These SPRs would reduce the potential for pile burns to impact water quality and would preserve unburned streamside buffers to capture runoff from treatment areas. SPR GEO-4 requires implementation of erosion controls prior to the next rainy season and inspection for evidence of erosion after the first large storm or rainfall event. Any areas of erosion that would result in substantial sediment discharge would be remediated. Impacts would be consistent with the PEIR and less than significant with implementation of these SPRs.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing environment, regulatory conditions, and proximity to surface waters are essentially the same in the areas within and outside the treatable landscape. Therefore, the water quality impact from pile burning outside the treatable landscape would be the same, as described above, and would be less than significant with the implementation of the same SPRs. This determination is consistent with the PEIR.

Impact HYD-2

The proposed project would include mechanical and manual treatments. Manual treatments would include use of hand tools and hand-operated power tools which would be used to cut, clear, or prune herbaceous woody vegetation and remove dead wood vegetation. Mechanical treatments would be used to cut, uproot, crush/compact, or chop existing vegetation on slopes up to 50 percent. Wheeled equipment would only be used on slopes up to 30 percent. No fill or discharge of fill material into waters of the U.S. would occur as part of the proposed project because waters of the U.S. would be avoided. Use of equipment for vegetation removal along the banks of streams may necessitate a section 1602 permit from CDFW. The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.11.3, pages 3.11-27–3.11-29) and was found to be less than significant with the incorporation of the SPRs. Streams that cross the project area meet the waterbody classification criteria in accordance with the California Forest Practice Rules. Therefore, a WLPZ would be required for the proposed project. SPRs applicable to these treatments are AD-3, HYD-1, HYD-2, HYD-4 through HYD-6, GEO-1 through GEO-8, BIO-1, BIO-4, BIO 5, and HAZ-1. SPRs AD-3, HYD-1, HYD-4, and GEO-4 through GEO-8, which are described under Impact HYD-1. SPRs GEO-1 through GEO-3 require the suspension of ground disturbance during heavy precipitation, limit high-ground-pressure vehicles, and require stabilizing disturbed-soil areas. SPRs HYD-2 and HYD-5 would require that the construction of new roads be avoided, and that equipment be fueled and serviced outside of wet areas. SPRs BIO-1, BIO-4, and BIO-5 would require the review and survey of specified biological resources, and that treatment design avoid loss of riparian habitat function and avoid the conversion of chaparral habitat (i.e., maintain the habitat function). SPR HAZ-1 requires that all equipment be maintained and regularly inspected for leaks.

Implementation of these SPRs would either minimize or avoid the risk of substantial water quality degradation by implementation of mechanical treatment, thereby making the impacts less than significant, as consistent with the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. This impact is within the scope of the PEIR because the surface water conditions and regulatory conditions are essentially the same within and outside the CalVTP treatable landscape, and the use of heavy equipment and hand-held tools to remove vegetation and associated impacts on water quality would be consistent with those analyzed in the PEIR. Impacts would be the same, and less than significant, with the implementation of the same SPRs.

Impact HYD-3

Project treatments would not include prescribed herbivory. No impact to water quality from prescribed herbivory would occur.

Impact HYD-4

Project treatments would include targeted herbicide application, primarily by spot spray treatments using a backpack sprayer and foliar application. No aerial spraying of herbicides would occur. Herbicides would be applied with adherence to all U.S. Environmental Protection Agency (EPA) and California Environmental Protection Agency (CalEPA) regulations and in such a way as to prevent overdrift. The use of herbicides has the potential to violate water quality standard regulations or degrade water quality, which was examined in the PEIR, with a finding that the impacts would be less than significant (CalVTP Final PEIR Volume II Section 3.11.3, pages 3.11-29–3.11-31). SPRs applicable to this treatment are AD-3, BIO-1, BIO-4, BIO-5, GEO-1, GEO-7, HAZ-1, HAZ-5, HAZ-7, HYD-1, HYD-4, HYD-5, and HYD-6. All applicable SPRs listed, except SPR HAZ-5 and HAZ-7, are described in Impact HYD-1 and Impact HYD-2. SPRs HAZ-5 and HAZ-7 would ensure that a spill prevention and response plan is implemented and that herbicide containers be triple rinsed. These SPRs would minimize or avoid the risk of substantial water quality degradation by implementation of herbicide treatment, thereby making the impacts less than significant.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. The existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent the treatable landscape and have similar environmental conditions, including the same waterbodies and the same regulatory setting. Potential impacts outside the treatable area are within the scope of the activities and impacts addressed in the PEIR because the methods of herbicide application, transportation, storage, and disposal are consistent with those analyzed in the PEIR with implementation of the same SPRs. This determination is consistent with the PEIR.

Impact HYD-5

Some of the proposed project treatments could cause ground disturbance and minor erosion, which could directly or indirectly modify existing drainage patterns. The potential for treatments to substantially alter the existing drainage pattern was examined in the PEIR, and the impacts were found to be less than significant (CalVTP Final PEIR Volume II Section 3.11.3, page 31). As described in the PEIR, these activities would have minor impacts to on-site drainage with implementation of SPRs. The potential impacts are within the scope of the activities and impacts addressed in the PEIR because the use of equipment and treatment activities would be consistent with those analyzed in the PEIR. SPRs applicable to this treatment are AD-3, BIO-4, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, HYD-1, HYD-2, HYD-4, and HYD-6. All applicable SPRs listed are described in Impact HYD-1 and HYD-2. These SPRs would avoid and minimize the risk of substantial altering of the existing drainage pattern, thereby making the impacts less than significant.

The inclusion of land that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, and existing drainage patterns pass through both areas. Therefore, the impact related to alteration of site drainage patterns is also the same. The potential for those treatments to substantially alter the existing drainage patterns of a treatment area was evaluated in the PEIR and was found to be less than significant with implementation of the same SPRs. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed project would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope for hydrology and water quality is California's hydrologic regions and groundwater basins (CalVTP Final PEIR Section 4.4.10, page 4-21). The proposed project, both inside and outside the treatable landscape, would be within the geographic scope of the cumulative analysis. Contributions of the proposed project would therefore not be cumulatively considerable for Impacts HYD-1 through HYD-5.

New Hydrology and Water Quality Impacts

The site-specific characteristics of the proposed project would be consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.11.1 Regulatory Setting and Section 3.11.2 Environmental Setting in Volume II of the Final PEIR). The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the hydrology, water quality, and treatment methods would be consistent with those analyzed in the PEIR; thus, they are also within the scope of the PEIR. Additionally, the existing environmental and regulatory conditions pertinent to hydrology and water quality are the same inside as outside of treatable landscape within the project area.

3.11 Land Use and Planning, Population and Housing

3.11.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact LU-1: Cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation?	LTS	Impact LU-1, pp. 3.12-13–3.12-14	yes	AD-3	NA	LTS	no	yes
Impact LU-2: Induce substantial unplanned population growth?	LTS	Impact LU-2, pp. 3.12-14–3.12-15	yes	NA	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New land use and planning, population and housing impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion

3.11.2 Discussion

Impact LU-1

The proposed project would develop and maintain a fuel break through the use of manual treatments, ground-based mechanical treatments, pile burning, and targeted herbicide application as well as biomass disposal, including pile burning. The northern portion of the project site is within the City of Grass Valley SOI, and the southern portion is within unincorporated Nevada County. Treatments would occur on private property. The potential for vegetation treatment activities to cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.12.3, pages 3.12-13–3.12-14). The proposed project would comply with all applicable city and county general plans, policies, and ordinances (SPR AD-3). As noted in Section 3.12: Noise, treatment activities would take place during daytime hours, consistent with the Nevada County Noise Element. The project would comply with sections 4290 and 4291 of the California Resources Code, which require property owners to establish defensible space around their properties. The proposed project would also comply with Nevada County's specific fire codes such as the Hazardous Vegetation Abatement Ordinance and Article 2 section 8.16.200 of the City of Grass Valley Municipal Code. The proposed project would comply with the City of Grass Valley tree work permit. The permit is required to remove trees greater than 10 inches dbh on any private lands and removal of significant trees[4] or street trees[5] greater than 24 inches dbh on any public lands or within the public right-of-way.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent considered in the PEIR. However, land use in the project area is essentially the same within as outside the treatable landscape because the areas are within the same jurisdictions, are adjacent, and include the same types of private and public uses. Therefore, the land use impact is also the same, as described above, and would be less than significant. No conflict would occur because the project proponent would adhere to SPR AD-3. This determination is consistent with the PEIR.

Impact LU-2

The specific crews who would conduct treatments are not known at this time. A contractor crew typically consists of 20 workers for mechanical treatment, between 20 and 40 workers for hand

[4] A significant tree is defined as a tree having a trunk of 24 caliper inches or larger in dbh.

[5] Street trees are defined as any tree within the public right-of-way.

treatment, 4 workers for herbicide application, and approximately 45 workers for prescribed burning. The potential for treatments to result in substantial population growth as a result of increases in demand for employees was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.12.3, pages 3.12-14–3.12-15). The CalVTP PEIR estimates the average crew size to consist of 20 to 25 workers. Impacts associated with short-term increases in the demand for workers during implementation of the treatment project are within the scope of the PEIR and would be less than significant. The number of workers required for implementation of the treatments is consistent with the crew size analyzed in the PEIR for the types of treatments proposed. The proposed project would not require the permanent hiring of new employees.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the population and housing characteristics of the project area are essentially the same within as outside the treatable landscape, the project area and treatable landscape are within the same jurisdictions, and the crews who would perform the work would be the same. Therefore, the population and housing impacts would be the same, as described above, and less than significant. No SPRs are applicable to this impact. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to the approximately up to 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope of land use and planning, population, and housing impacts is the treatable landscape. As noted in the CalVTP PEIR, because the proposed project is assessed for its potential to conflict with land use plans, policies, or regulations and to mitigate any potential impacts, as necessary, there are no existing significant cumulative impacts related to conflicts with land use plans, policies, and regulations that are developed for the purpose of avoiding or mitigating an environmental effect. Therefore, the cumulative land use impact analysis for the proposed project is the same as described in the PEIR and is not cumulatively considerable for Impact LU-1.

The geographic scope for the population and employment cumulative analysis is the treatable landscape and surrounding areas, which encompasses the proposed project and includes lands surrounding the treatable landscape. The proposed project would not substantially increase the employment demand because the PEIR considered employment demand for up to 500,000 acres annually and found that the combination of employment demand for CalVTP and these cumulative projects would not be a substantial cumulative increase that would exceed planned population growth throughout the state or result in cumulative growth in some areas that would result in the need for new housing, roads, or infrastructure. The cumulative impact to population and housing for the proposed project would be the same as described in the PEIR, and inducement of substantial population growth would not be cumulatively considerable.

New Land Use and Planning, Population, and Housing Impacts

The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.12.1 Environmental Setting and Section 3.12.2 Regulatory Setting in Volume II of the Final PEIR).

Within the boundary of the project area, the existing environmental conditions pertinent to land use and population that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed project is consistent with the types of projects covered in the PEIR. No circumstances would be changed, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impact. Therefore, no new impact related to land use and population would occur.

3.12 Noise

3.12.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact NOI-1: Result in a substantial short-term increase in exterior ambient noise levels during treatment implementation?	LTS	Impact NOI-1, pp. 3.13-9–3.13-12; Appendix NOI-1	yes	AD-3, NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6.	NA	LTS	no	yes
Impact NOI-2: Result in a substantial short-term increase in truck-generated SENLs during treatment activities?	LTS	Impact NOI-2, p. 3.13-12	yes	AD-3, NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6.	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New noise impacts: Would the treatment result in other impacts to noise that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.12.2 Discussion

Impact NOI-1

The project treatment activities that have the potential for short-term increase in ambient noise level include manual treatments and ground-based mechanical treatments. The manual treatments for this project include hand-operated power tools, and the mechanical treatments include but are not limited to skid steers, chippers, and masticators. Treatments would generally occur Monday through Sunday between 7:00 a.m. and 5:00 p.m., anticipated to begin in Spring/Summer 2025. Work would be conducted over several years, including retreatment within 5 to 7 years. Maintenance in forested wildlands would be every 10 to 12 years. Multiple crews may be working at the same time, temporarily increasing ambient noise. Due to the nature of the proposed project, private residences and other noise sensitive land uses are adjacent to the work area and would temporarily be exposed to noise. The project area falls within the city of Grass Valley SOI as well as unincorporated Nevada County. The potential for treatment activities to cause substantial short-term increases in exterior ambient noise level was addressed in the PEIR (CalVTP Final PEIR Volume II Section 3.13.3, page 3.13-9–3.13-12). SPRs applicable to the proposed project include AD-3, which requires the treatments to be consistent with local plans, policies, and ordinances. The Noise Element of the Nevada County General Plan (Nevada County 1995) establishes maximum exterior noise levels for various land use categories. However, construction activities or projects associated with the provision of emergency services or functions are exempt from the County's noise standards. All work would be conducted within the permitted times, per SPR AD-3. Additional SPRs applicable to the proposed project include NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6. SPRs NOI-1 through NOI-6 would require that heavy equipment be used only during daytime hours, equipment be properly maintained, engine shrouds be closed during mechanical equipment operation and idle time restricted to 5 minutes, all staging areas be placed away from noise sensitive land uses, and any noise sensitive receptors be notified ahead of work to ensure impacts to ambient noise levels would be less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent the treatable landscape and would be subject to the same noise ordinances and would have similar noise sensitive receptors. This determination is consistent with the PEIR.

Impact NOI-2

The project treatment activities would require large trucks to haul equipment and crews to the project area. While trucks would pass sensitive receptors (i.e., residences), it is not anticipated that project traffic would result in a substantial increase in truck-generated noise along local roads. These large trucks pose the potential for a substantial short-term increase in *single event noise levels* (SENL), but trucks would only be in use during work hours from 7:00 a.m. to 5:00 p.m. Monday through Sunday, in compliance with local noise ordinances (see Impact NOI-1). The SENL describes a receiver's cumulative noise exposure from a single impulsive noise event (e.g., an automobile passing by, an aircraft flying overhead), which is defined as an acoustical event of short duration and involves a change in sound pressure above some reference value (CAL FIRE 2019). The impacts would be within the scope of the PEIR because the treatment activities and methods would be the same as those analyzed in the PEIR. SPRs applicable to this treatment are AD-3, NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6, as described under Impact NOI-1. The potential for a substantial short-term increase in SENL during the project treatments was evaluated in the PEIR and was found to be less than significant with the implementation of the aforementioned SPRs.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing roadway network and access road used by the worker vehicles and trucks for hauling would be the same to reach the treatable landscape inside the treatable landscape as outside. Therefore, the noise impact would be the same, as described above, and would be less than significant with the application of the same SPRs. This determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP EIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope of the noise resource cumulative impact analysis from the CalVTP EIR is the entirety of the treatable landscape. In addition to the lands treated under the CalVTP PEIR, there are several similar past, present, and reasonably foreseeable projects that could generate similar noise within and surrounding the treatable landscape (CalVTP Final PEIR Section 4.4.1 page 4-23). Based on review of the PEIR cumulative analysis, the proposed project would fall within the cumulative analysis for noise because they would be within the 250,000 acres assumed treated annually, would have similar conditions to the cumulative setting due to their proximity to the treatable landscape and similar vegetation conditions, and would have the same noise sensitive receptors due to their adjacency to the treatable landscape. As noted in the PEIR, it is not anticipated that temporary noise generated by vegetation treatment activities under the CalVTP, and noise related to non-CalVTP projects would simultaneously impact the same noise-sensitive receptors due to the size of the treatable landscape and duration of the vegetation treatments (CalVTP Final PEIR Section 4.4.12 page 4-23). The noise impacts would occur during a limited duration and would be reduced through SPR NOI-1, SPR AD-3, SPR

NOI-6, and SPR NOI-4. Therefore, the cumulative noise impact analysis for the proposed project, including the areas outside the treatable landscape, is the same as described in the PEIR and is not cumulatively considerable.

New Noise Impacts

The site-specific characteristics of the proposed project area are consistent with the applicable environmental and regulatory conditions presented in the PEIR (refer to Section 3.13.1 Environmental Setting and Section 3.13.2 Regulatory Setting in Volume II of the Final PEIR). The existing environmental and regulatory conditions pertinent to noise that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed project is consistent with the types of projects covered in the PEIR. No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to noise would occur that is not analyzed in the PEIR.

3.13 Recreation

3.13.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact REC-1: Directly or indirectly disrupt recreational activities within designated recreation areas?	LTS	Impact REC-1 pp. 3.14-6–3.14-7	yes	AD-3, REC-1	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New recreation impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.13.2 Discussion

There are no known recreational facilities within the project area. The potential for vegetation treatment and maintenance activities to disrupt recreation activities was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.14.3 pages 3.14-6–3.14-7). The potential for the proposed project to impact recreation is within the scope of the PEIR and would be less than significant because the treatment activities and intensity are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. There are no recreational resources in the project area that is outside the treatable landscape. Impacts on recreation would be the same as previously described and would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to the approximately up to 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope of the recreation cumulative impact analysis from the PEIR is the recreational areas within the treatable landscape. As noted in the PEIR, implementation of the CalVTP would treat vegetation within the treatable landscape and would not involve the development of residential communities or similar types of development or induce substantial population growth in an area that would require the construction or expansion of recreational facilities (CalVTP Final PEIR Section 4.4.13, page 4-24). Proposed treatment activities may temporarily restrict public access to surrounding areas for safety reasons or cause nuisance impacts related to dust, noise, safety, aesthetics, and traffic; this would disrupt the recreation experience both inside and outside the treatable landscape. As noted in the PEIR, SPRs would minimize disruptions to recreational users. Impacts to recreation are not anticipated to be cumulatively considerable and, thus, the proposed project would not make a significant contribution to disruption of recreational resources.

New Recreation Impacts

The proposed project is consistent with the treatment types and activities considered in the PEIR. The site-specific characteristics of the proposed project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.14.1 Environmental Setting and Section 3.14.2 Regulatory Setting in Volume II of the Final PEIR).

Within the boundary of the project area, the existing environmental conditions pertinent to recreation that are present in the project area outside the treatable landscape are essentially the same as those within the treatable landscape, as described previously. No circumstances would be changed, and the inclusion of areas outside of the CalVTP treatable landscape would not result in any new significant impacts. Therefore, no new impact related to recreation would occur.

3.14 Transportation

3.14.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact TRAN-1: Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures?	LTS	Section 3.15.2; Impact TRAN-1 pp. 3.15-9–3.15-10	yes	AD-3, TRAN-1	NA	LTS	no	yes
Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses?	LTS	Impact TRAN-2 pp. 3.15-10–3.15-11	yes	AD-3, TRAN-1	NA	LTS	no	yes
Impact TRAN-3: Result in a net increase in VMT for the proposed CALVTP?	PSU	Impact TRAN-3 pp. 3.15-11–3.15-13	yes	NA	AQ-1	LTSM	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New transportation impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.14.2 Discussion

Impact TRAN-1

The proposed project would require limited vehicular traffic along public roadways used to access the treatment areas. Private properties would be used as access points to treatment areas in addition to existing roads and trails. Project-related traffic would include heavy-vehicle trips to haul equipment and materials as well as trips associated with the workers commuting to and from the project area. Phase I treatments would involve less heavy equipment than Phase II treatments, since Phase I treatment would focus on retreatments. Crew sizes would be similar to those analyzed in the PEIR and would be unlikely to exceed 45 workers. Work would generally occur during weekdays between 7:00 a.m. and 5:00 p.m.; therefore, the increase of vehicle traffic on the surrounding local roads would occur before 7:00 a.m. and after 5:00 p.m. The number of truck trips and worker vehicle trips to and from the project area would vary based on the size of the area being treated, the type of treatment being implemented, and the duration of the vegetation treatments. The potential for a temporary increase in vehicle traffic associated with the proposed project work to conflict with a program, plan, ordinance, or policy addressing roadway facilities, or for prolonged road closures, was examined in the PEIR (CalVTP Final PEIR Section 3.15.2, page 3.15-9 and 3.15-10) and found to be less than significant. The anticipated temporary increases in traffic related to the proposed project is within the scope of the PEIR because the treatment duration and limited number of vehicles (i.e., crane, masticator transport, and crew vehicles for crew members) associated with the proposed project are consistent with those analyzed in the PEIR. The proposed project treatment activities would not all occur concurrently, nor would they all occur annually, and increases in vehicle trips associated with the treatments would be dispersed on multiple roads, including local roads. SPRs applicable to the project are AD-3 and TRAN-1. Implementing SPR AD-3 would require the treatments to be consistent with local plans, policies, and ordinances, and TRAN-1 would ensure that traffic control measures would be placed on affected roadways during project treatment activities.

The inclusion of land in the proposed treatment area that is outside the treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing transportation conditions (e.g., roadways, road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they continue beyond the treatable landscape and are under the same jurisdictions and would be subject to the same program, plan, ordinance, or policy regarding roadway facilities and closures. Therefore, the transportation impact would be the same and would be less than

significant with the implementation of the same SPRs. This determination is consistent with the PEIR.

Impact TRAN-2

Pile burning could potentially increase the transportation impacts during portions of the project due to smoke emissions, which could temporarily affect visibility on nearby roadways. The potential for smoke to affect visibility along roadways during implementation pile burning is analyzed in the PEIR (CalVTP Final PEIR Section 3.15.2, page 3.15-10 and 3.15-11) and was found to be less than significant. Vegetation piles for burning would be approximately 4 feet in diameter and 4 feet in height, and pile burning would be conducted in compliance with CAL FIRE and Northern Sierra Air Quality Management District (NSAQMD) Regulation 3 for open burning and burn day restrictions. SPRs applicable to this treatment are AD-3 and TRAN-1, described under Impact Tran-1. The project proponent would prepare and implement a Traffic Management Plan (TMP) to avoid and minimize temporary transportation impacts under this SPR. Therefore, the project treatment activities would not substantially increase hazards due to a design feature or incompatible uses, and impacts would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

The project area includes land that is outside the treatable landscape. While this constitutes a minor change to the geographic area considered in the PEIR, the project would use the same access roads for land inside and outside the treatable landscape. Therefore, the potential to increase road hazards would be the same for project areas outside the treatable landscape as for areas within the treatable landscape. This being the case, the impact to increased hazards is also the same and within the scope of the PEIR. The project would result in a less-than-significant impact related to increasing road hazards and would not result in a more significant impact than covered in the PEIR.

Impact TRAN-3

The proposed project treatment activities could temporarily increase vehicle miles travelled (VMTs) above baseline conditions because the project access locations are remote locations along local roadways and private properties. Project-related traffic would include heavy-vehicle trips to haul equipment and materials as well as trips associated with the workers commuting to and from the treatment areas. The number of truck trips and worker vehicle trips to and from the project area would vary based on the size of the area being treated and the duration of the vegetation treatments. This impact was identified as potentially significant and unavoidable in the PEIR (CalVTP Final PEIR Section 3.15.2, page 3.15-11 to 3.15-13) because implementation of the CalVTP would result in a net increase in VMT. However, as stated in Impact TRAN-3 of the PEIR, individual projects under the CalVTP are likely to generate fewer than 110 trips per day, which is expected to cause a less-than-significant transportation impact for specific later activities, as described in the Technical Advisory on Evaluating Transportation Impacts published by the Governor's Office of Planning and Research (Governor's Office of Planning and Research 2018). Per the analysis methodologies presented in the PEIR, projects that generate or attract fewer than 110 trips or 50 vehicles bringing crews and equipment to and

from the project area per day generally may be assumed to result in a less-than-significant transportation impact. While the cubic yards of material that could be disposed of each workday from a single treatment area would vary, it would likely constitute fewer than 10 typical dump trucks. Because crews would likely require under 45 workers and due to the limited equipment needed and limited materials to be hauled in any one day, the total VMT would not exceed 110 trips per day. Removed biomass, if not disposed of on site, would require more vehicle trips than other treatment activities. Vehicle trips would be dispersed across several roadways and would utilize particular roadways for short durations. On this account, impacts related to a potential increase in VMT would be less than significant. Hiring local contractors would be encouraged where feasible to reduce the number of VMTs. MM AQ-1 would not apply to the impact because the impact would be less than significant.

The inclusion of land in the proposed treatment area that is outside the treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the existing transportation conditions (e.g., roadways, road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they are a continuation of the same roads. Therefore, the transportation impact would be the same, as described above, and would be less than significant. No SPRs apply to this impact, nor would MM AQ-1, as impacts would be less than significant.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts for the proposed CalVTP would occur within and proximate to the approximately up to 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope of the transportation cumulative impact analysis from the PEIR is the treatable landscape and the surrounding roadway network used to access individual vegetation treatment sites. In addition to the lands treated under the CalVTP PEIR, there are several similar past, present, and reasonably foreseeable projects that have affected and likely would affect transportation networks within and surrounding the treatable landscape (CalVTP Final PEIR Section 4.4.14, page 4-24). As noted in the PEIR, the cumulative analysis would generally be based on the number of projects using the same roadways as the project. The PEIR found that, given the scattered locations of the vegetation projects and the limited duration of work at any one location, it is unlikely that cumulative impacts would occur (CalVTP Final PEIR Section 4.4.14, page 4-24). Implementation of SPRs also reduces the contribution of the project to any potentially cumulative impact, regardless of whether the use of the roadways is inside or outside the treatable landscape. Therefore, the cumulative transportation impact analysis for the proposed project, including the areas outside the treatable landscape, is the same as described in the PEIR and is not cumulatively considerable for Impact TRANS-1 and TRANS-2. The PEIR found that impacts are cumulatively considerable for Impact TRANS-3 and, while the VMTs from the project would be minor, they would still contribute to the significant cumulative impact regardless of the reasonable expectation that a net VMT reduction could occur in the long term and that impacts from individual vegetation treatments would likely be less than significant pursuant to the thresholds identified in OPR's Technical Advisory on Evaluating

Transportation Impacts. The proposed project, however, given its limited duration and location, would not result in a cumulatively considerable contribution to an otherwise significant cumulative effect.

New Transportation Impacts

The site-specific characteristics of the proposed project are consistent with the applicable environmental and regulatory conditions presented in the PEIR (refer to Section 3.15.1 Environmental Setting and Section 3.15.2 Regulatory Setting in Volume II of the Final PEIR). Within the boundary of the project area, the existing environmental conditions pertinent to transportation that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed project is consistent with the types of projects covered in the PEIR. No circumstances would be changed, and the inclusion of areas outside of the treatable landscape would not result in any new significant impact. Therefore, no new impact related to transportation would occur.

3.15 Public Services, Utilities and Service Systems

3.15.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact UTIL-1: Result in physical impacts associated with provision of sufficient water supplies, including related infrastructure needs?	LTS	Section 3.16.1 pp. 3.16-2–3.16-3; Impact UTIL-1 p. 3.16-9	yes	NA	NA	LTS	no	yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity?	PSU	Section 3.16.1 pp. 3.16-3–3.16-5; Impact UTIL-2 pp. 3.16-10–3.16-12	yes	AD-3, UTIL-1	NA	LTS	no	yes
Impact UTIL-3: Comply with federal, state, and local management and reduction goals, statutes, and regulations related to solid waste?	LTS	Section 3.16.2 pp. 3.16-6–3.16-7; Impact UTIL-2 p. 3.16-12	yes	AD-3, UTIL-1	NA	LTS	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New public services, utilities, and service systems impacts: Would the treatment result in other impacts to public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.15.2 Discussion

Impact UTIL-1

The proposed project would develop and maintain a fuels-reduction and forest health restoration zone through use of manual treatments, ground-based mechanical treatments, and targeted herbicide application as well as biomass disposal, including pile burning. A minimal amount of water would be required for fire suppression during pile burning activities and for dust control during mechanical treatments. Depending on the location of the pile burning or mechanical treatments, water would be supplied via nearby fire hydrants or be transported via fire trucks and/or water tender. The potential increased demand for water was examined in the PEIR (CalVTP Final PEIR Section 3.16.3 page 3.16-9) and was found to be a less-than-significant impact. This impact is within the scope of the activities and impacts addressed in the PEIR because the amount of water and the water source are consistent with those analyzed in the PEIR. The water usage constitutes a minimal demand on local water providers. Implementation of the project treatments would not result in a physical impact associated with provision of sufficient water supplies, including related infrastructure needs, and this impact would be less than significant. No SPRs are applicable to this impact.

The project area includes lands that are outside the treatable landscape, which constitutes a minor change to the geographic extent presented in the PEIR. Within the project area, the existing conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because the water use and water service providers would be the same. The treatment activities and intensity of the treatments would be consistent with those analyzed in the PEIR. Therefore, the impact to water providers would be the same and would be less than significant, as previously described. No SPRs are applicable to this impact. This determination is consistent with the PEIR.

Impact UTIL-2

Manual and mechanical treatments to remove invasive species or other vegetation would generate biomass. Biomass generated by mechanical and manual treatments would be processed by hauling, chipping and hauling, chipping and broadcasting, mulching using a tracked masticator, and pile burning. The cut vegetation materials may be processed in a variety of ways if off-hauled, including but not limited to use in pyrolysis-biomass conversion or enhanced composting. The chipped biomass would be broadcast on site, with chipped materials cut to under 3 inches in size, and applied at a depth of no more than 5 inches to minimize wildfire risk. The remaining biomass that could not be broadcast on site would be hauled off site to the Mountain F Enterprises facility, the McCourtney Road Transfer station, or another

appropriate biomass processing facility or used as appropriate in other areas of Nevada County. The cubic yards of material disposed of each workday from a single treatment area would vary and the exact volume is unknown which is consistent with the analysis in the PEIR. The potential to generate solid waste in excess of state standards was examined in the PEIR (CalVTP Final PEIR Section 3.16.3 page 3.16-10 – 3.16-12) and was found to be a less than significant impact. This is because SPRs AD-3 and UTIL-1 would apply to this potential impact. AD-3 requires the project proponent to design and implement the project consistent with local plans and ordinances, and UTIL-1 requires the project proponent to prepare a Solid Organic Waste Disposition Plan to guide biomass disposal once the estimate of the amount of biomass that would be transported offsite is known. The potential biomass impact is within the scope of the activities and impacts identified in the PEIR as the conditions for removing biomass are consistent with the analysis in the PEIR. This impact of generating solid waste in excess of state standards or exceeding local infrastructure capacity was identified as potentially significant and unavoidable in the PEIR due to the possibility of generating waste in excess of infrastructure capacity and reflects CEQA's mandate of good-faith disclosure of all potential effects.

Locally, Mountain F Enterprises and the McCourtney Road Transfer Service Station facilities indicate they have available capacity to receive the project's solid organic waste and also have the ability to transport it to composting facilities. Mountain F Enterprises has a permitted capacity to receive 200 tons of organic material per day. The McCourtney Road Transfer Station has the permitted capacity to receive 65 tons of organic material per day and the large volume transfer/processing of 350 tons of waste per day (CalRecycle n.d.). Therefore, the impact on solid waste disposal would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than identified in the PEIR.

The inclusion of land that is outside of the treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, the land included has essentially the same environmental conditions as those assessed within the treatable landscape and a similar amount of biomass material for disposal would result, with the use of the same local facilities for disposal. The same SPRs would be implemented to ensure consistency with local plans and ordinances and ensure a disposition plan. Therefore, the impact generated from solid waste in excess of state standards outside the treatable landscape would be less than significant. The proposed project entails a lesser impact than that of the statewide program, and the determination is consistent with the PEIR.

Impact UTIL-3

Project treatments would generate biomass, which would be disposed of by chipping and hauling, chipping and broadcasting, mulching using a tracked masticator, and pile burning. The potential to conflict with federal, state, and local waste management requirements was examined in the PEIR (CalVTP Final PEIR Section 3.16.3 page 3.16-12) and was found to have a less-than-significant impact. The biomass that remains after pile burning, other biomass processing methods, and broadcasting would be transported to Mountain F Enterprises and the McCourtney Road Transfer Service Station facilities, or a local use for the chips would be

investigated. As discussed under Impact UTIL-2, the locations have sufficient permitting capacity to receive the input from the project. The proposed project was evaluated for compliance with the federal, state and local goals related to solid waste as examined in the PEIR. The project would apply SPR UTIL-1, which requires a Solid Organic Waste Disposition Plan. The proposed project is within the scope of activities and impacts identified in the PEIR.

The inclusion of land outside the treatable landscape constitutes a minor change to the geographic extent of the PEIR. However, the environmental conditions outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent, would generate a similar amount of solid waste, and would use the same waste disposal facilities. Therefore, the impact related to compliance with federal, state, and local goals and regulations regarding solid waste would be less than significant. The determination is consistent with the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed project would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope for public services, utilities, and service systems is the treatable landscape (CalVTP Final PEIR Section 4.4.15, page 4-25). Treatment activities would result in an increase in solid organic waste transported off site for processing but, as previously noted, the waste facilities would not exceed existing infrastructure capacities. Use of alternative disposal methods, such as transporting waste to composting sites or using pile burning, would further reduce the waste transported to typical waste treatment facilities. The PEIR identifies potential for a cumulatively significant impact. The proposed project's contribution to cumulative impact to public service, utilities, and service systems, however, would not be cumulatively considerable and would be consistent with the analysis in the PEIR.

New Impacts to Public Services, Utilities, and Service Systems

The site-specific characteristics of the proposed project area have been considered and found to be consistent with the applicable environmental and regulatory conditions presented in the PEIR (refer to Section 3.16.1 Environmental Setting and Section 3.16.2 Regulatory Setting in Volume II of the Final PEIR). The conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as described above. Therefore, the impacts of the proposed project are also consistent with those covered in the PEIR. No circumstances would be changed, and the inclusion of areas outside of the treatable landscape as well as addition of biomass treatment options would not give rise to any new significant impacts not addressed in the PEIR. Therefore, no new impact related to public service, utilities, and service systems would occur that is not covered in the PEIR.

3.16 Wildfire

3.16.1 Checklist

Environmental impact covered in the PEIR	Identify impact significance in the PEIR	Identify location of impact analysis in the PEIR	Does the impact apply to the treatment project?	List SPRs applicable to the treatment project	List MMs applicable to the treatment project	Identify impact significance for treatment project	Would this be a substantially more severe significant impact than identified in the PEIR?	Is this impact within the scope of the PEIR?
Impact WIL-1: Substantially exacerbate fire risk and expose people to uncontrolled spread of a wildfire	LTS	Section 3.17.1; Impact WIL-1 pp. 3.17-14–3.17-15	yes	HAZ-2, HAZ-3, HAZ-4	NA	LTS	no	yes
Impact WIL-2: Expose people or structures to substantial risks related to post-fire flooding or landslides	LTS	Section 3.17.1; Impact WIL-2 pp. 3.17-15–3.17-16	yes	HAZ-2, HAZ-3, HAZ-4, GEO-3, GEO-5, GEO-8	NA	LST	no	yes

NA: Not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

None: There are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the proposed project.

New wildfire impacts: Would the treatment result in other impacts to wildfire resources that are not evaluated in the CalVTP PEIR?

☐ Yes ☒ No

If yes, provide explanation in discussion.

3.16.2 Discussion

Impact WIL-1

The primary goal of the proposed project is to reduce wildfire hazards and provide improved site access for firefighters and emergency personnel in the event of a fire as well as to reduce the intensity of or slow down the spread of wildfires and to mitigate the threat of wildfires to the surrounding community. Treatments would include pile and other biomass treatment options along with mechanical treatments, which could result in temporary risks associated with uncontrolled wildfire and accidental wildfire ignition. The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.17.3, pages 3.17-13–3.17-14). Increased wildfire risk associated with pile burning and use of heavy equipment in vegetated areas is within the scope of the PEIR. SPRs HAZ-2, HAZ-3, and HAZ-4 would be implemented to reduce the risk of exposure to wildfire by requiring spark arrestors on mechanical hand tools, smoking would be prohibited in vegetated areas, and crews would carry one fire extinguisher per chainsaw. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than covered in the PEIR.

The inclusion of land in the project area that is outside the treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they are adjacent and have a similar wildfire risk profile, and the type of equipment and treatment duration of the proposed project outside the treatable landscape are consistent with those analyzed in the PEIR. The same SPRs would be required to reduce the risk of wildfire. Therefore, the wildfire impact would be the same and less than significant, as previously described.

Impact WIL-2

The proposed project would include pile burning and mechanical treatment using heavy equipment. The potential for post-fire flooding and landslides was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.17.3, pages 3.17-14–3.17-15). Heavy equipment would generally be used on slopes up to 50 percent. Wheeled equipment would typically be used on slopes up to 30 percent. The proposed project would implement SPR GEO-8, which requires an RPF or geologist to evaluate treatment areas with slopes of greater than 50 percent for unstable areas and soils. Implementation of SPRs GEO-3 and GEO-5 would stabilize soil disturbed during mechanical treatments and drain compacted and/or bare linear-treatment areas capable of generating storm runoff via water breaks. The project proponent would also inspect all

treatment areas for the proper implementation of erosion control SPRs and mitigations (SPR GEO-4) to minimize potential for landslides. Impacts would be less than significant and within the scope of the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a minor change to the geographic extent presented in the PEIR. However, within the project area, the post-fire landslide risk is essentially the same within and outside the treatable landscape because they are adjacent, and the slopes and risk of post-fire flooding or landslides would be similar. Therefore, the wildfire impact outside the treatable landscape would be the same and less than significant, as described above, with implementation of the same SPRs. The impact outside the treatable landscapes would be consistent with the lands analyzed in the PEIR.

Cumulative Impacts

As noted in the CalVTP PEIR (CalVTP Final PEIR Section 4.1.1, page 4-1), impacts of the proposed CalVTP would occur within and proximate to approximately 250,000 annually treated acres that are located within the 20.3-million-acre treatable landscape. The geographic scope for wildfire is the treatable landscape and adjacent areas because impacts related to wildfire (i.e., uncontrolled spread of wildfire or post-fire flooding or landslides) are location specific, and only projects within or adjacent to the treatable landscape could combine to result in cumulative wildfire impacts (CalVTP Final PEIR Section 4.4.16, page 4-26). As noted in the PEIR, while the treatments could result in short-term increase in fire risk from prescribed burning, in this case—pile burning—the proposed project would reduce overall wildfire risk and would have a beneficial effect related to wildfire. The PEIR does not identify potentially cumulatively significant impacts to wildfire, and the proposed project's contribution to wildfire risk would be consistent with the analysis in the PEIR and would not be cumulatively considerable. Therefore, pile burning under the proposed project would be consistent with the PEIR and would not expose people or structures to substantial risks from post-pile-burning landslides or flooding, and the proposed project's contribution to impacts related to post-fire flooding or landslides from implementation of treatment activities would not be cumulatively considerable.

New Impacts to Wildfire

The site-specific characteristics of the proposed project have been considered and found to be consistent with the applicable regulatory and environmental conditions presented in the PEIR (refer to Section 3.17.1 Regulatory Setting and Section 3.17.2 Environmental Setting in Volume II of the Final PEIR). Within the project area, the existing environmental and regulatory conditions pertinent to wildfire that are present in the project area outside the treatable landscape are essentially the same as those within the treatable landscape, as described above. Therefore, the impacts of the proposed treatment project are consistent with those analyzed in the PEIR. No circumstances would be changed, and the inclusion of areas outside of the treatable landscape would not result in any new significant impacts not addressed in the PEIR. Therefore, no new impact related to wildfire risk would occur that is not covered in the PEIR.

4 References

ASM Affiliates. 2025. "Phase I Cultural Resources Inventory Report for the Ponderosa West Grass Valley Extension Project, Phase I and II, Nevada County, California."

California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

———. 2018. *California Forest Carbon Plan*. https://ww2.arb.ca.gov/sites/default/files/2019-01/California-Forest-Carbon-Plan-Final-Draft-for-Public-Release-May-2018.pdf.

California Air Resources Board (CARB). 2014. "California Air Basin Map." March 14, 2014. https://ww3.arb.ca.gov/ei/maps/statemap/abmap.htm.

California Department of Conservation (CDOC). 2011. "CGS Map Sheet 58: Deep-Seated Landslide Susceptibility." Using Arc GIs (January 27, 2025). https://cadoc.maps.arcgis.com/home/item.html?id=3cdc744bec6b45c28206e472e8ad0f89.

———. n.d. "Geologic Map of California." Accessed December 30, 2024. https://maps.conservation.ca.gov/cgs/gmc/.

California Department of Fish and Wildlife (CDFW). 2023. "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species." https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.

California Department of Forestry and Fire Protection (CAL FIRE). 2019. *California Vegetation Treatment Program Final Program Environmental Impact Report*. State Clearinghouse # 2019012052.

California Department of Toxic Substances Control (DTSC). n.d. "EnviroStor." Online data search. https://www.envirostor.dtsc.ca.gov/public/.

California State Water Resources Control Board (SWRCB). n.d. "GeoTracker." Online data search. https://geotracker.waterboards.ca.gov/.

CalRecycle. n.d. "SWIS Facility/Site Search." n.d. https://www2.calrecycle.ca.gov/SolidWaste/Site/Search.

Caltrans. n.d. "California State Scenic Highway System Map." https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

CARB. 2019. "California Air Resources Board 2017 Scoping Plan Identified VMT Reductions and Relationship to State Climate Goals."

———. 2023. "Maps of State and Federal Area Designations." 2023. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

City of Grass Valley. 2018. *City of Grass Valley Energy Action Plan*. https://www.cityofgrassvalley.com/sites/main/files/file-attachments/attachment_f-_energy_action_plan.pdf?1680817017.

———. 2020. *City of Grass Valley 2020 General Plan*. https://www.cityofgrassvalley.com/post/general-plan-housing-element.

4 REFERENCES

Dennis, M.E. 2002. "Hazard Control Plan: HCP Number CGPR-0073-005, R3 Air Curtain Destructor (Airburner) Operations at TA-16 Borrow Pit."

Governor's Office of Planning and Research. 2018. "Technical Advisory on Evaluating Transportation Impacts in CEQA." https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.

Natural Resources Conservation Service (NRCS). 2024. "Custom Soil Resource Report for Nevada County Area, California." USDA. https://websoilsurvey.nrcs.usda.gov/app/.

Nevada County. 1995. *Nevada County General Plan*. https://www.nevadacountyca.gov/1065/General-Plan.

Sacramento River Watershed Program. n.d.-a. "Bear River Watershed." Accessed January 27, 2025. https://sacriver.org/explore-watersheds/american-river-subregion/bear-river-watershed/.

———. n.d.-b. "Yuba River Watershed." Accessed January 27, 2025. https://sacriver.org/explore-watersheds/american-river-subregion/yuba-river-watershed/.

Stillwater Sciences. 2025. *Biological Resource Evaluation for the Ponderosa West Grass Valley Extension Project, Nevada County, California*. Draft Technical Memorandum.

U.S. Environmental Protection Agency (EPA). 2024. "Nonattainment Areas for Criteria Pollutants (Green Book)." November 30, 2024. https://www.epa.gov/green-book.

Attachment A: Standard Project Requirements Checklist and Mitigation Measures Checklist

1 Mitigation Monitoring and Reporting Program

Introduction

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project because the PSA/Addendum identifies potential significant adverse impacts, Standard Project Requirements (SPRs) that are incorporated into the program description to avoid and minimize adverse effects, and all feasible mitigation measures (MMs) that have been adopted. Where potentially significant impacts remain after application of SPRs, MMs have been identified to further reduce and/or compensate for those impacts. While only mitigation measures are required to be covered in an MMRP, both SPRs and MMs are included in the CalVTP MMRP to assist in implementation of all environmental protection features of later activities consistent with the CalVTP PEIR. In addition to the SPRs and MMs, Nevada County OES has developed specific Project Design and Implementation Features (PDIFs) adapted from several source documents that will be incorporated as applicable into the project design and implementation for each of its projects.

Purpose of Mitigation Monitoring and Reporting Program

This MMRP has been prepared to monitor the implementation of SPRs and mitigation measures in connection with the approval of the CalVTP PEIR and its use by project proponents. The attached tables present the text of each SPR and MM, the timing of its planned implementation, the implementing entity, and the entity with monitoring responsibility. The numbering of SPRs and MMs follows the numbering used in the CalVTP PEIR. SPRs and mitigation measures that are referenced more than once in the PSA/Addendum are not duplicated in the MMRP.

Roles and Responsibilities

Unless otherwise specified herein, the Project Proponent (Nevada County) is responsible for verifying and monitoring implementation of the mitigation measures within its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed, pursuant to Section 15097 of the State CEQA Guidelines. Implementation of the vegetation treatment project will be managed by the Nevada County

Office of Emergency Services (OES) and associated fire agencies. The Nevada County OES and their contractors will implement the mitigation measures.

The Project Proponent is responsible for overall administration of the project-specific MMRP and for verifying that staff members, associated fire agencies, or contractors have completed the necessary actions for each measure (i.e., appropriate amendments to the proposed ordinance).

Reporting

The Project Proponent will document and describe the compliance of the proposed project with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report.

Mitigation Monitoring and Reporting Program Table

The categories identified in the attached MMRP table are described below.

Applicable. The SPRs or MMs from the CalVTP PEIR and listed below in Table 1 and Table 2 are applicable to the initial treatment and/or maintenance of the proposed project. A yes/no (Y/N) is placed next to the initial treatment and treatment maintenance to indicate if it is applicable to that stage of treatment. MMs and SPRs not applicable to initial or maintenance treatments for the proposed project were removed from the tables.

Timing. This column identifies the time frame in which the SPR or mitigation measure will be implemented (e.g., prior to treatment, during treatment, etc.) (Table 1 and Table 2).

Implementing Entity. The implementing entity is the agency or organization responsible for carrying out the requirement. Nevada County OES, Contractor, or Nevada County OES & Contractor is indicated in this column to identify which entity will be the responsible party (Table 1 and Table 2).

Verifying/Monitoring Entity. The verifying/monitoring entity is the agency or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity. See Table 1 and Table 2.

Standard Project Requirements/Project Design and Implementation Features

Table 1 Standard Project Requirements/Project Design and Implementation Features Applicable to the Nevada County OES - Ponderosa West Grass Valley Extension Project

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Administrative				
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES	Nevada County OES
SPR AD-4 Public Notifications for Prescribed Burning: At least days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES
Aesthetic and Visual Resource				
SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as	Initial Treatment: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Contractor	Nevada County OES
SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During-After	Contractor	Nevada County OES
Air Quality				
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES & Contractor	Nevada County OES
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less	Initial Treatment: Y	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES
SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113. Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES & Contractor	Nevada County OES
SPR AQ-6: Prescribed Burn Safety Procedures: Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours;	Initial Treatment: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
Archaeological, Historical, and Tribal Cultural Resources				
SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: N	Prior	Nevada County OES	Nevada County OES
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following: A written description of the treatment location and boundaries. Brief narrative of the treatment objectives. A description of the activities used (e.g., prescribed burning, mastication) and associated acreages. A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. A request for information regarding potential impacts to cultural resources from the proposed treatment.	Initial Treatment: Y Treatment Maintenance: N	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
A detailed description of the depth of excavation, if ground disturbance is expected. In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studies, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: N	Prior-During for areas not already surveyed	Nevada County OES	Nevada County OES
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on	Initial Treatment: Y	Prior-During	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Treatment Maintenance: Y			
SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES	Nevada County OES
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES
Biological Resources				
SPR BIO-1: Review and Survey Project-Specific Biological Resources: The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands,	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment: 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR BIO-2: Require Biological Resource Training for Workers: The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Sensitive Natural Communities and Other Sensitive Habitats				
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats: If SPR BIO-1 determines that sensitive natural communities or sensitive habitat may be present and adverse effects cannot be avoided, the project proponent will: require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES
SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function: Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats: Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities. Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements. Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service).				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints. Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry. The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway. In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub: The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed). During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will: Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale. The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance. Additional measures will be applied to ecological restoration treatment types: For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types. Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved. A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology. If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity. These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance. A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.				
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training; minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Special-Status Plants				
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF	Initial Treatment: Y Treatment Maintenance: N	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances: If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Invasive Plants and Wildlife				
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife: The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
(e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles; treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
plant materials in a closed container or bag to prevent the spread of propagules during transport; and implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Wildlife				
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites: If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: N	Prior	Nevada County OES	Nevada County OES
SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be	Initial Treatment: Y	During	Nevada County OES & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food). If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following:	Treatment Maintenance: Y			

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Establish Buffer. The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. Modify Treatment. The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist. Defer Treatment. The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests: Monitor Active Raptor Nest During Treatment. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases. Retention of Raptor Nest Trees. Trees with visible raptor nests, whether occupied or not, will be retained. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Geology, Soils, and Mineral Resource				
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing,	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
(3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During-After	Nevada County OES & Contractor	Nevada County OES
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
burning treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity. (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.				
Hazardous Material and Public Health and Safety				
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During-After	Contractor	Nevada County OES
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES & Contractor	Nevada County OES
SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: Be implemented consistent with recommendations prepared annually by a licensed PCA. Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. Be applied by an applicator appropriately licensed by the State. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment	Initial Treatment: Y	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
Hydrology and Water Quality				
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation	Initial Treatment: Y Treatment Maintenance: Y	Prior-During-After	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes. The following WLPZ protections will be applied for all treatments: Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version). Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Fire Agency & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas. WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. Burn piles will be located outside of WLPZs. No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers. Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse. Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes. Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.				

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicide: Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. No terrestrial or aquatic herbicides will be applied within Watercourse and Lake Protection Zones (WLPZs) of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by California Department of Pesticide Regulation, if warranted) to prevent overspray.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.				
SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES & Contractor	Nevada County OES
Noise				
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Contractor	Nevada County OES
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are	Initial Treatment: Y	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
Recreation				
SPR REC-1 Notify Recreational Users of Temporary Closures: If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent to will [sic] coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES
Transportation				
SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES & Contractor	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance. Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.				
Public Services and Utilities				
SPR UTIL-1: Solid Organic Waste Disposition Plan: For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended	Initial Treatment: Y Treatment Maintenance: N	Prior	Nevada County OES	Nevada County OES

Standard Project Requirements/Project Design and Implementation Features	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.				

Mitigation Measures

Table 2 CalVTP PEIR Mitigation Measures Applicable to the Nevada County OES - Ponderosa West Grass Valley Extension Project

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Air Quality				
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: • Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each	**Initial Treatment: Y** **Treatment Maintenance: Y**	During	Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. • Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: – meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; – be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; – contain no fatty acids or functionalized fatty acid esters; and – have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. • Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. • Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. • Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.				
Archaeological, Historical, and Tribal Cultural Resources				
Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency	**Initial Treatment:** Y **Treatment Maintenance:** Y	During-After	Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.				
Biological Resources				
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior-During	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (nor use of associated accelerants) will occur within 50 feet of listed plants. For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.				
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA	**Initial Treatment:** Y	Prior-During	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: • Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape. • Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. • Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the	**Treatment Maintenance:** Y			

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation. • No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer. A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. – For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c. – Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.	**Initial Treatment:** Y **Treatment Maintenance:** Y	During	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Maintain Habitat Function • The project proponent will design treatment activities to maintain the habitat function, by implementing the following: – While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. – If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained. • A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.				
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> • The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer	**Initial Treatment:** Y **Treatment Maintenance:** Y	During	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). • No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. • For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods. <u>Maintain Habitat Function</u> • For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: – While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. – If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. – A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment.				
Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures will be implemented: • Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34). • Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants.	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
• Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type will not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore. • Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year. • Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained. If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c. CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species'				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.				
Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible:	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
• Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. • Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. • Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). • Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September). CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required				
Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
• Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. • Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1. • To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). • To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
• Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). • Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory. The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.				
Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands Impacts to wetlands will be avoided using the following measures: • The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. • The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior-During	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures). • A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. • A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. • Within this buffer, herbicide application is prohibited. • Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging. • Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: – No special-status species are present in the wetland habitat – The wetland habitat function would be maintained. – The prescribed burn is within the normal fire return interval for the wetland vegetation types present – Fire containment lines and pile burning are prohibited within the buffer – No fire ignition (and associated use of accelerants) will occur within the wetland buffer				

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: • **Retain Known Nursery Sites**. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment • **Establish Avoidance Buffers**. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior-During	Nevada County OES & Contractor	Nevada County OES
Greenhouse Gas Emissions				
Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior-During	Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018): • reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; • reduce the total area burned through mosaic burning; • burn when fuels have a higher fuel moisture content; • reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and • schedule burns before new fuels appear. As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.				
Hazardous Materials, Public Health and Safety				
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous	**Initial Treatment:** Y **Treatment Maintenance:** Y	Prior	Nevada County OES & Contractor	Nevada County OES

CalVTP PEIR Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.				

Attachment B: Biological Resource Evaluation for the Ponderosa West Grass Valley Extension Project

TECHNICAL MEMORANDUM ◦ APRIL 2025

Biological Resource Evaluation for the Ponderosa West Grass Valley Extension Project, Nevada County, California

PREPARED FOR

Nevada County
Office of Emergency Services
950 Maidu Avenue
Nevada City, CA 95959

PREPARED BY

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Suggested citation:

Stillwater Sciences 2025. Biological Resource Evaluation for the Ponderosa West Grass Valley Extension Project, Nevada County, California. Technical Memorandum. Prepared by Stillwater Sciences, Berkeley, California for Nevada County, California.

Cover photos taken during the field habitat assessment in December 2024, clockwise from top right: a perennial pond surrounded by Montane Hardwood-Conifer forest; nonnative ruderal herbaceous species in Annual Grassland habitat; a landscape view of a portion of the Project Area; and an understory view of Montane Hardwood in Phase I that had been previously treated.

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1 INTRODUCTION

1.1 Project Background

Nevada County is proposing the Ponderosa West Grass Valley Extension Project (Project) to maintain an existing fuel break and create a new fuel break around the community of Grass Valley. Approximately 1,200 acres of private land was treated in western Grass Valley as part of the Ponderosa West Grass Valley Defense Zone Phase I Project, which was completed on March 15, 2022. This Project would involve retreatment of a portion of the 2022 treatment area, identified as Phase I of the proposed project, and fuel reduction within a new treatment area, called Phase II of the proposed project resulting in hazardous vegetation abatement on a total of approximately 900 acres of private and County lands.

Nevada County has evaluated the Project for California Environmental Quality Act (CEQA) compliance under CAL FIRE's California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR) and determined that all proposed treatment types and treatment activities are consistent with those described in the CalVTP PEIR. For the purposes of implementing the CalVTP, Nevada County is considered the Project proponent and is serving as the CEQA lead agency.

1.2 Project Location and Project Area

The Project Area includes the full extent of Phase I and Phase II treatment areas (Figure 1). State Route (SR) 20 bisects the Phase I treatment area. The Phase II treatment area is approximately 1.25 miles north of SR 20 near the community of Rough and Ready. Bureau of Land Management (BLM)-managed land is directly west of the Phase I treatment area. The treatment areas are owned and/or managed by private landowners and/or the County.

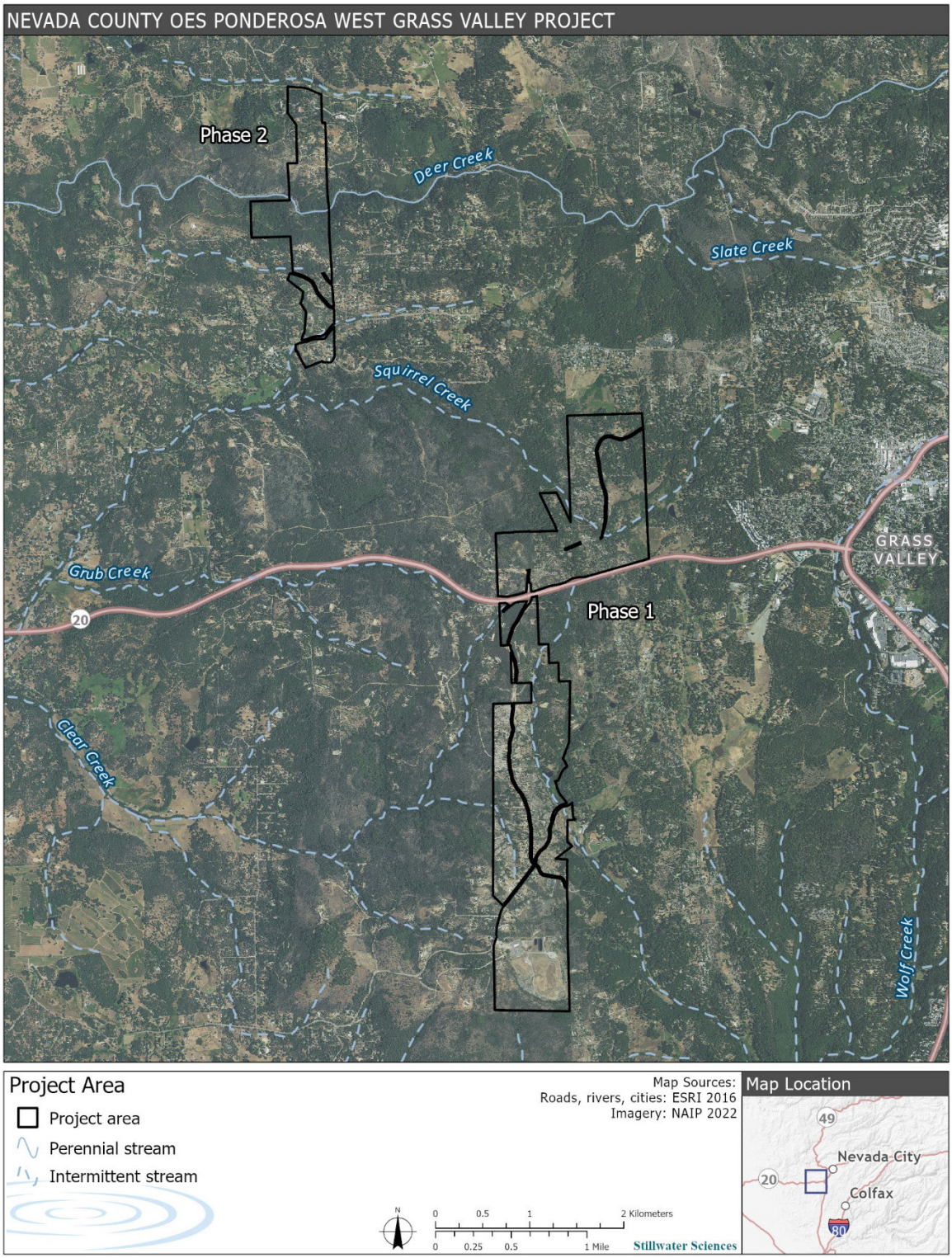

Figure 1. Project location and Project Area.

1.3 Project Goals

The goals of the Project are:

- to create and maintain a continuous reduced-fuel and forest-health-restoration zone to reduce wildfire hazards, including wildfire intensity and rate of spread; and
- to provide strategic locations for firefighters and emergency personnel to fight a wildfire in the event of ignition.

1.4 Project Description

Phase I treatments would focus on the retreatment of areas that were treated in 2022. Phase I retreatments would likely be less intense than fuel reduction activities for the Phase II treatment area and would concentrate on the maintenance of conditions created during initial treatment activities. However, treatment prescriptions for Phase I and Phase II treatments areas would generally be the same and focus on vertical and horizontal spacing, removal of invasive and non-native, fire hazardous vegetation, and removal of dead and dying vegetation.

Fuel break widths would be determined by fire professionals and based on fuel types, slope, access, site conditions, and land management constraints. General parameters include the following:

- Within the drip line of larger trees, trees less than 10 inches dbh would be thinned and/or removed.
- Outside the drip line of larger diameter trees, trees less than 10 inches dbh would be thinned to achieve horizontal spacing of approximately 25 feet.
- Large diameter trees (10+ inches dbh or greater) may be removed to achieve desired spacing to break up the overstory canopy continuity.

1.4.1 Activity types

Fuel treatment methods would vary depending on cover type, condition of vegetation, topography, costs, and efficiency and in conformance with landowner/manager requirements. The primary treatment methods or activities that may be implemented would include manual treatments, ground-based mechanical treatment, and targeted herbicide application as described in CalVTP PEIR Section 2.5.2 (Ascent Environmental 2019) and summarized below.

1.4.1.1 Manual treatment

Manual treatment would be used where access for larger equipment is not feasible or not appropriate. Manual treatments would include use of hand tools and hand-operated power tools to cut, clear, girdle, or prune herbaceous woody species and remove dead woody vegetation and low-lying shrubs and brush as well as trees. Some invasive species removal would also be performed by hand (or mechanically) removal. Equipment would include chainsaws, pole pruners, loppers, and string trimmers.

Removal of vegetation within a Watercourse and Lake Protection Zones (WLPZ) would be limited to manual treatments to create or maintain fuel break function and effectiveness. Treatments within a WLPZ would be designed to avoid impacts to riparian and aquatic function. Dead or dying trees within a WLPZ would be marked by a Registered Professional Forester (RPF) prior to tree removal, or tree removal would be conducted under the supervision of an RPF.

1.4.1.2 Ground-based mechanical treatment

Heavy equipment or mastication would be applied to treatment areas to remove and transport existing trees and cut, crush/compact, or chop other vegetation. This equipment would generally be used on slopes up to 50 percent. Wheeled equipment would be used on a maximum slope of 30 percent. The equipment and tools would include skid steers or tractors with mounted masticators and tracked and towed-behind chippers. No tilling or discing would occur, and heavy equipment operations would not be conducted within WLPZs, except for maintenance of roads and drainage facilities or structures.

1.4.1.3 Herbicide application

The Project would use herbicides, along with other methods of invasive species' eradication, as part of an integrated pest management approach. Herbicides would be applied in a targeted manner. Application methods would include targeted application onto stumps and cut vegetation immediately after cutting and as follow up treatment, as needed, to kill or prevent regrowth of invasive and non-native species. Foliar application may be used for broom. No broadcast or aerial spraying would occur. Herbicides would only be used as allowable based on local regulations and provisions in the CalVTP and in agreement with the landowner. The herbicides allowed under the CalVTP EIR include the following:

- Borax (tetraborate decahydrate)
- Clopyralid (monoethanolamine salt)
- Glyphosate (isopropylamine salt, potassium salt, dimethylamine salt, and diammonium salt)
- Hexazinone
- Imazapyr (isopropylamine salt)
- Sulfometuron Methyl
- Triclopyr (butoxyethyl ester & triethylamine salt)
- Nonylphenol 9 Ethoxylates (NP9E)
- Cleantraxx (penoxsulam & oxyfluorfen)
- Velpar (hexazinone)
- Indaziflam

Herbicide application under the CalVTP must comply with the U.S. Environmental Protection Agency (EPA) label directions as well as California Environmental Protection Agency and Department of Pesticide Regulation (DPR) label standards. The application method chosen would depend on the written recommendations of an independent *pest control advisor* (PCA) licensed by DPR for the targeted weed species and characteristics of the site for which the treatment is proposed. No herbicide treatments would occur within WLPZs.

1.4.2 Biomass removal

Project debris would be processed through hauling, chipping and hauling, chipping and broadcasting, mulching using a tracked masticator, and pile burning. The cut vegetation materials may be processed in a variety of ways if off-hauled, including but not limited to use in pyrolysis–biomass conversion or enhanced composting. Approximately 20 cubic yards of material would be off-hauled for processing each workday.

Chipped material would be broadcast at treatment areas or hauled away for processing. If kept at treatment sites, chipped materials would be chipped to under 4 inches in size and broadcast to a maximum depth of 4 inches. Chipped material would not be broadcast onto roads, trails, or into the water or dry channel of any streams. Vegetative material, if removed, would be hauled to the Mountain F Enterprises facility, the McCourtney Road Transfer Station, or another appropriate biomass-processing facility or used as appropriate in other areas of Nevada County.

Cut material would be pile burned, depending upon access and the conditions of the treatment area. Piles would not exceed 4 feet in diameter and 4 feet in height. Feeder piles would be built in areas where there is too much vegetation to create individual piles and stacked in windows with the end of limbs piled on one side. Where Scotch broom is removed, piles would consist of half broom and half woody material for future burning. Piles containing broom and broom seeds would be covered to ensure that the pile is contained. Suitable burn pile areas would include flat or gentle slopes that have open areas away from tree canopies and power lines and waterways; target locations would include existing roads or landings and/or on invasive plants or broom piles. Multiple piles would potentially be burned on a single day in compliance with CAL FIRE and NSAQMD Regulation 3 for open burning and burn day restrictions.

1.4.3 Post-treatment retention goals

Post-treatment average stand density would ideally be between 75 and 100 square feet basal area per acre on tree-dominated sites. At least one brush or groups of brush would be retained on brush-dominated sites, so that no point is further than 150 feet from a specimen. One shrub or a group of shrubs would be retained on shrub-dominated sites, so that no point is further than 30 feet from a live shrub. Disconnected clumps and individual plants of live vegetation may be retained where they do not pose as ladder fuels. All trees greater than 10 inches dbh, and shrubs greater than 8 inches stump diameter would be retained unless:

- a tree of any size is a direct threat to personal safety or infrastructure; or
- an RPF determines that an alternative standard would be preferable for meeting management objectives or improves the health of the forest stand; and
- is identified prior to cutting by an RPF or fire professional.

At least one snag, large woody debris, or tree that is important for wildlife would be retained per acre. Stumps and root balls would be mostly retained with the exception of cut stumps that pose a hazard or logistical challenge. Cut stumps would be treated with herbicide if regrowth is likely. Understory ladder fuels including non-native, invasive shrubs, along with shrub-like understory tree saplings, may be removed as may hazardous trees (e.g., dead or dying trees) identified by an RPF or qualified fire professional. Biomass would be managed through one or more of the techniques listed above.

1.4.4 Schedule

Treatments are anticipated to begin in spring/summer 2025 and each implementation season would generally occur from April through July and November through February, as weather and on-the-ground conditions permit (e.g., red flag warnings, winter weather). Treatments would typically occur Monday through Sunday primarily between 7:00 a.m. and 5:00 p.m.; however, work outside these hours may be required under limited conditions such as the need to finish up treatment if leaving treatment overnight would cause a safety risk. No nighttime work would be required.

1.4.5 Continued maintenance

Nevada County would continue to work with local stakeholders and cooperators to maintain the Phase I and Phase II treatment areas. The condition of the treatment areas after initial treatment would be monitored annually or as appropriate, depending upon the vegetation types. If maintenance does not occur annually, the Project Area would need to be retreated within 5 to 7 years. In forested wildlands, the Project Area would be treated every 10 to 12 years. Subsequent treatments are anticipated to be the same as the Project activities but are subject to change depending on the site's condition and response to initial treatment.

1.5 Report Purpose

The purpose of this report is to identify protected biological resources that have the potential to occur within or near the Project Area and identify the CalVTP standard project requirements (SPRs) and mitigation measures (MMs) that would be incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation. The PEIR considers the following to be protected biological resources:

- Special-status species are defined as:
    - any species listed as endangered or threatened under the federal Endangered Species Act (ESA), including those proposed for listing and candidates for possible future listing;
    - any species listed as endangered or threatened under the California Endangered Species Act (CESA), including candidates for listing;
    - designated as Fully Protected under the California Fish and Game Code (Sections 3511, 4700, 5050, and 5515);
    - listed as rare under the California Native Plant Protection Act; and/or
    - included on California Department of Fish and Wildlife's (CDFW) most recent *Special Vascular Plants, Bryophytes, and Lichens List* with a California Rare Plant Rank (CRPR) of 1A, 1B, 2A, or 2B (CDFW 2025a).
    - designated as a species of special concern by CDFW;
    - species that are locally significant, as designated in local or regional plans, policies, or ordinances; and/or
    - species that are otherwise defined as rare or endangered under CEQA or other designation (e.g., the federal Bald and Golden Eagle Protection Act).
- Sensitive natural communities are defined as those natural community types with a state ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) as listed in the most recent California Natural Community List (CDFW 2025b).
- Critical habitat is defined as those geographic areas designated by the U.S. Fish and Wildlife Service that would require protection or special management to support the conservation of an endangered or threatened species.

The Project Area includes a portion of Deer Creek, which flows into Lake Wildwood. Downstream of Lake Wildwood, Deer Creek flows into the South Yuba River, which supports anadromous salmonids. Anadromous salmonids are occasionally documented in the lower reaches of Deer Creek but cannot move upstream to Lake Wildwood or the Project Area because of a natural fish passage barrier and Anthony House Dam. Therefore, this report assumes there is

no potential habitat for special-status salmonids. No other special-status fish have been documented in the reach of Deer Creek that flows through the Project Area, nor in any other waterbodies in the Project Region (CDFW 2024b).

2 METHODS

2.1 Existing Information Review

Lists of the special-status plant and wildlife species and sensitive natural communities with the potential to occur within the Project Area based on habitat suitability (soils, habitat type, elevation, and distributional range) were developed by querying and reviewing the following resources:

- California Native Plant Society's (CNPS's) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2024);
- U.S. Fish and Wildlife Service's (USFWS's) Information for Planning and Conservation (IPaC) portal for federally listed and proposed endangered, threatened, and candidate species (USFWS 2024a); and
- CDFW's California Natural Diversity Database (CNDDB) (CDFW 2024b).

The CNPS and CNDDB database queries were each based on a search of the U.S. Geological Survey (USGS) 7.5-minute quadrangles in which the Project is located (Grass Valley, Rough and Ready, French Corral), and the surrounding quadrangles (Rackerby, Challenge, Camptonville, Oregon House, Nevada City, Smartville, Camp Far West, Wolf, Lake Combie, Colfax, Chicago Park, North Bloomfield) which is referred to as the Project Region. The USFWS database query was based on a search of a digitized geographic information system (GIS) shapefile of the Project Area. Database query results are summarized in Appendix A[1].

In addition, the following information sources were reviewed to inform evaluations of special-status species with potential to occur within the Project Area:

- eBird (eBird 2024);
- iNaturalist (iNaturalist 2024);
- North American Bat Acoustic Monitoring Portal (BatAMP) (Conservation Biology Institute and USDA Forest Service 2025) (closest grid cells 38698, 5930, and 91561 located between about 1–4 miles from the Project Area); and
- species-specific literature.

2.2 Reconnaissance-level Surveys

Reconnaissance-level surveys were conducted on December 4–5, 2024 by two biologists (R. Thoms, botanist; and S. Abidi, wildlife biologist).

[1] No sensitive natural communities have been documented in the Project Region; therefore, there is no table for sensitive natural communities in Appendix A.

2.2.1 Vegetation and habitat mapping

To develop a preliminary vegetation map prior to conducting a reconnaissance-level survey, vegetation community types mapped by CalVeg (USDA Forest Service 2024) using the existing California Wildlife Habitat Relationship (CWHR) classification scheme (CDFW 2021) were reviewed against the available imagery in GIS. Supplemental sources such as the National Wetlands Inventory (NWI; USFWS 2024b), Soil Survey Geographic Database (SSURGO; USDA NRCS 2024), and USGS data on substrates (Jennings et al. 2010) were used to determine habitats that may support a variety of biological resources. A prioritization scheme was developed to identify parcels that represented the full variety of site conditions—as well as any locations with previously documented special-status biological resources—to ensure those would be visited during the reconnaissance-level survey.

During the reconnaissance-level survey, vegetation boundaries were refined only to the level necessary to assess for the potential to support sensitive natural communities. The percent cover of dominant and associate plant species was recorded in representative areas to confirm or update the existing designation. Post-field, adjustments to vegetation type boundaries were digitized into a GIS shapefile to produce a final vegetation map of the Project Area.

To determine the potential for sensitive natural communities to occur within the Project Area, the online Manual of California Vegetation (CNPS 2025a) was utilized to crosswalk CWHR vegetation types to the alliance level; any alliances listed as a sensitive natural community (CNPS 2025a) were reviewed for the characteristic species and membership rules and then compared to species observed in the field. If the characteristic species of a sensitive natural communities were observed during the reconnaissance-level survey, that sensitive natural community was determined to have the potential to occur within the Project Area.

2.2.2 Special-status plant assessment

During the reconnaissance-level surveys, habitats were evaluated for the potential to support the special-status plant species identified in the database queries (Appendix A) using the following categories:

- None: the Project Area was outside of the known distribution or elevation range for the species, and/or the required habitats were lacking from the Project Area.
- Unlikely: the known distribution or elevation range for the species may have encompassed some or all of the Project Area, but required habitats were generally lacking from the Project Area.
- Yes: the Project Area included suitable habitat within the known distribution or elevation range for the species, and/or the species had been previously documented within the Project Area.

2.2.3 Special-status wildlife assessment

The special-status wildlife species were reviewed including habitat requirements, known distribution, and location and date of recorded observations. During the reconnaissance-level survey, habitat types and features (e.g., burrows, large trees, nesting areas, stream hydrology, etc.) required by the special-status wildlife species identified from the database queries (Appendix A) were evaluated to determine the likelihood for each species to occur within the Project Area. General habitat conditions were photographed and evidence of wildlife activity (e.g., visual observations, scat, calls) was noted. The likelihood of occurrence was rated as one of the following categories:

- None: The habitat required to support the species is not present in the Survey Area or the area is outside the current or historical distribution.
- Low: The habitat is of very low quality or quantity in the Survey Area; suitable key habitat or habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences.
- Moderate: The habitat required to support the species is present in the Survey Area.
- High: The species has been documented within and or adjacent to the Survey Area and/or required habitat components are present and are high quality.

3 EXISTING CONDITIONS

Elevations within the Project Area ranged from approximately 1,970–2,495 feet above sea level. A general overview of conditions observed within the Project Area during the December 2024 field assessment included:

- mature, native forest and shrublands with some interspersed, landscaped areas;
- residential buildings and infrastructure (e.g., graveled and paved roads; powerlines) within tracts that varied from largely rural to sub-urban neighborhood developments;
- former burn scars, as well as forest and shrublands that had been previously treated to reduce fire fuels;
- one large perennial stream, Deer Creek[2], a tributary to the South Yuba River;
- several small creeks that ranged from intermittent to potentially perennial;
- several small ponds that were generally aesthetic/decorative, and were typically within the course of an ephemeral to intermittent stream channel; and
- hilltops, canyons, and mid-slopes that varied from nearly flat to as steep as approximately 40–50 percent slopes.

3.1 Vegetation and Habitat Types

The 1,481-acre Project Area was dominated by a relatively equal mix of Montane Hardwood (354.5 acres; 23.9 percent), Montane Hardwood-Conifer (323 acres; 21.8 percent), and Ponderosa Pine (284.9 acres; 19.2 percent) (Table 1, Figure 2 and Figure 3). The Project Area also contained 64.1 acres (4.3 percent) of Urban and 0.1 acres (less than 1 percent) of Cropland habitat types. The Project Area included several intermittent to perennial creeks and occasional human-made ponds that were too narrow or small to be detected by mapping completed by CalVeg; these areas generally supported a narrow band or ring of species that differed from the larger habitat types in which they occurred. The immediate vicinity around these aquatic habitats included native riparian tree species (e.g., Fremont cottonwood [*Populus fremontii* subsp. *Fremontii*], red willow [*Salix laevigata*], and arroyo willow [*Salix lasiolepis*]) as well as some upland trees (e.g., interior live oak [*Quercus wislizeni*] and incense cedar [*Calocedrus decurrens*]*)*, often with low to moderate cover of nonnative Himalayan blackberry (*Rubus armeniacus*) in the shrub layer.

[2] Deer Creek is a 303d-listed waterbody (i.e., list of waters not meeting water quality standards under the Clean Water Act).

The database query results indicated no sensitive natural communities had been previously documented in the Project Region. One sensitive natural community, Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii, macnabiana*] Woodland Alliance), was identified during the reconnaissance-level survey within the Closed-Cone Pine-Cypress habitat type. Based on the methods described in Section 2.2.1, there were no other potential sensitive natural communities that corresponded to the other CWHR habitat types.

Table 1. Summary of vegetation habitat types within the Project Area.

California Wildlife Habitat Relationship type	Acres	Percent of Project Area
Annual Grass	90.7	6.1%
Blue Oak-Foothill Pine	134.2	9.1%
Closed-Cone Pine-Cypress[1]	26.3	1.8%
Cropland	0.1	0.0%
Mixed Chaparral	203.4	13.7%
Montane Hardwood	354.5	23.9%
Montane Hardwood-Conifer	323.0	21.8%
Ponderosa Pine	284.9	19.2%
Urban	64.1	4.3%
Total	**1,481.2**	**100.0%**

[1] The sensitive natural community Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii*, *macnabiana*] Woodland Alliance; S3) was observed within this habitat type.

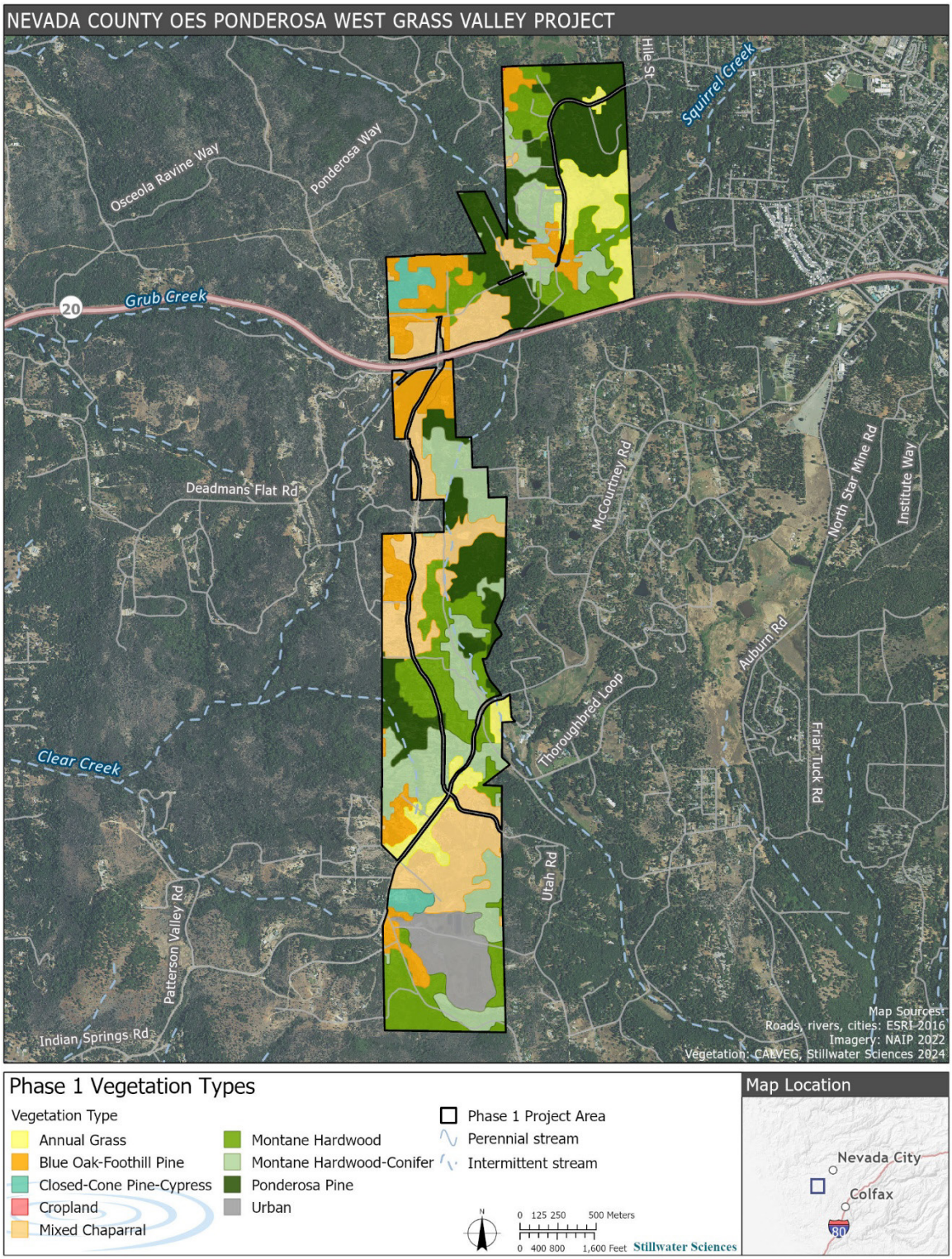

Figure 2. Habitat types within Phase 1 of the Project Area.

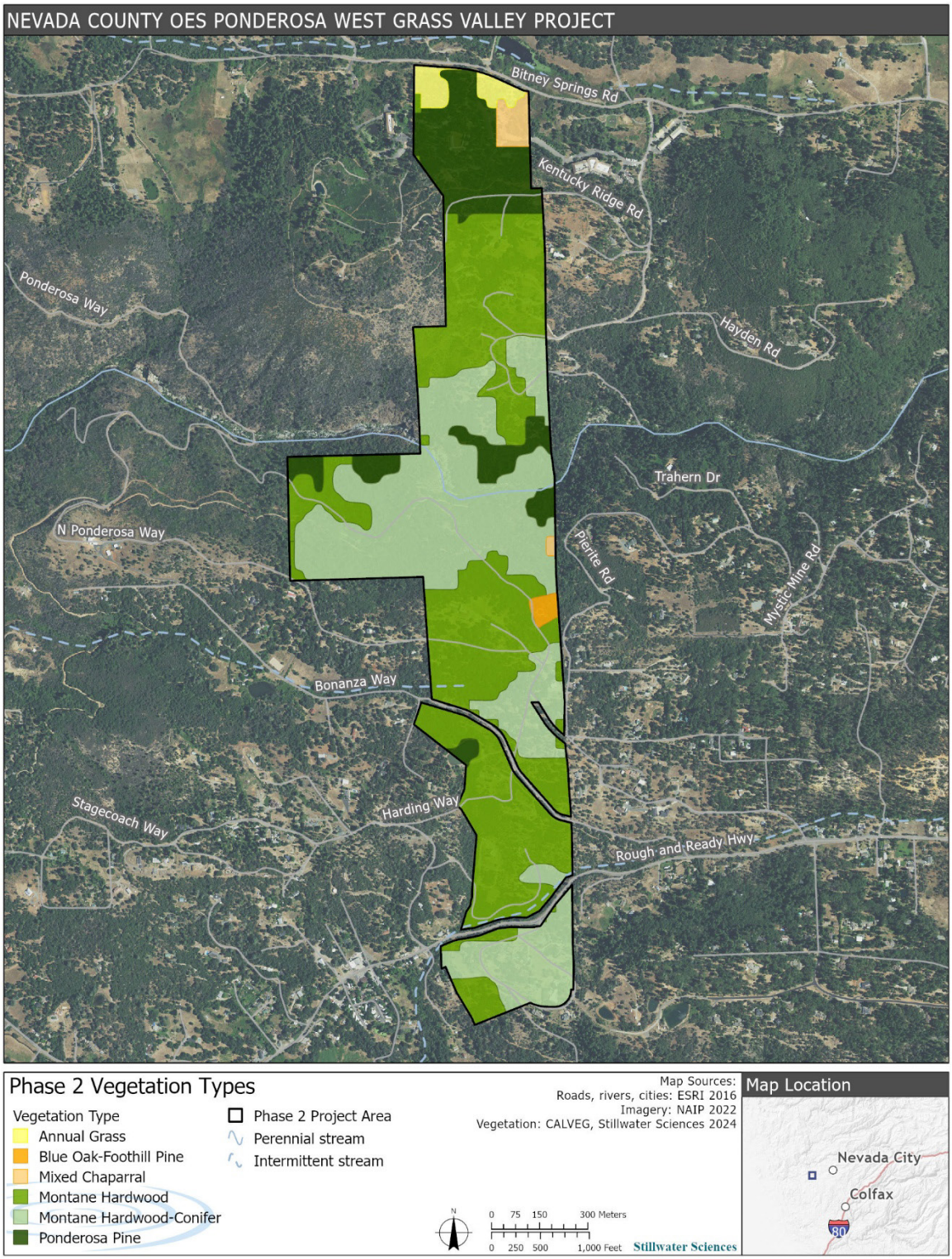

Figure 3. Habitat types within Phase 2 of the Project Area.

3.1.1 Annual Grass

A total of 90.7 acres of the Annual Grass habitat type (6.1 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Tree and shrub cover was sparse to nonexistent. In the herbaceous layer, cover of nonnatives was high and included species such as wild oats (*Avena* sp.), pale flax (*Linum bienne*), longbeak stork's bill (*Erodium botrys*), soft chess (*Bromus hordeaceus*), canarygrass (*Phalaris* sp.), nit grass (*Gastridium phleoides*), rye grass (*Festuca perennis*), barnyard grass (*Echinochloa crus-galli*) and dogtail grass (*Cynosurus echinatus*). The species that dominate the Annual Grass habitat within the Project Area do not correspond to any sensitive natural communities.

3.1.2 Blue Oak-Foothill Pine

A total of 134.2 acres of the Blue Oak-Foothill Pine habitat type (9.1 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Tree cover in the Blue Oak-Foothill Pine habitat type was low to moderate, dominated by the native tree species blue oak (*Quercus douglasii*), interior live oak and foothill pine (*Pinus sabiniana*), with occasional low cover of ponderosa pine (*Pinus ponderosa*). Cover in the shrub layer was moderate to high and frequently included whiteleaf manzanita (*Arctostaphylos viscida*) and buckbrush (*Ceanothus cuneatus*), with occasional low cover of toyon (*Heteromeles arbutifolia*). The herbaceous layer was generally sparse. The species that dominate the Blue Oak-Foothill Pine habitat within the Project Area do not correspond to any sensitive natural communities.

Given the habitat loss and type conversion protections in the CalVTP PEIR related to oaks (Ascent Environmental 2019), the Blue Oak-Foothill Pine habitat type was further refined to the Manual of California Vegetation (MCV) alliance level to comply with CalVTP protections. Based on the dominant species and membership rules, a portion of this CWHR type may correspond to blue oak woodland and forest (*Quercus douglasii* Forest & Woodland Alliance). The estimated fire return interval for this alliance is 5–15 years (CNPS 2025c).

3.1.3 Closed-Cone Pine-Cypress

A total of 26.3 acres of the Closed-Cone Pine-Cypress habitat type (1.8 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Tree cover in the Closed-Cone Pine-Cypress habitat type was generally patchy to moderate, dominated by the native tree McNab cypress (*Hesperocyparis macnabiana*), with grey pine also providing low cover. Cover in the shrub layer was generally low and often included whiteleaf manzanita, Sonoma sage (*Salvia sonomensis*) and buckbrush. Cover in the herbaceous layer was moderate.

Given that McNab cypress (*Hesperocyparis macnabiana*) was the dominant species observed during the reconnaissance-level survey, the habitat mapped as Closed-Cone Pine-Cypress would correspond in part or in whole to Ultramafic Cypress Woodland (*Hesperocyparis* [*sargentii*, *macnabiana*] Woodland Alliance), which is a sensitive natural community with a CDFW ranking of S3 (Vulnerable); a comprehensive survey would need to be conducted to confirm the extent of this alliance within the Project Area. McNab cypress is a fire-dependent conifer species; cones require fire and/or significant heat or desiccation to open and release seeds, which germinate best on bare mineral soil. Trees begin bearing cones by approximately 10 years of age; therefore, a fire return interval of no less than 15 years is necessary to maintain stands (CNPS 2025b). An age classification of the stands within the Project Area was not conducted during the reconnaissance-level survey; however, in stands that were visited it was observed that the trees were of reproductive age and bearing cones.

3.1.4 Mixed Chaparral

A total of 203.4 acres of the Mixed Chaparral habitat type (13.7 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Shrub cover in the Mixed Chaparral habitat type was occasionally patchy but generally moderate to dense, dominated by the native shrubs whiteleaf manzanita, Sonoma sage and interior live oak of shrub stature; associated shrub species included coast silk-tassel (*Garrya elliptica*), toyon, and buckbrush. Cover in the tree canopy, when present, was low and included interior live oak with occasional grey pine. Cover in the herbaceous layer was low and occasionally included a species of sedge (*Carex* sp.) that may be the special-status chaparral sedge (*Carex xerophylla*), although reproductive parts were not available to confirm the identification (see Section 3.2).

The species that dominate the Mixed Chaparral habitat within the Project Area do not correspond to any sensitive natural communities. Given the habitat loss and type conversion protections in the CalVTP PEIR (Ascent Environmental 2019), the Mixed Chaparral vegetation type was further refined to MCV alliance level to comply with CalVTP protections. Based on the dominant species and membership rules, a majority of this CWHR type would be classified as whiteleaf manzanita chaparral (*Arctostaphylos viscida* Shrubland Alliance). The estimated fire return interval for this alliance is 20–70 years (CNPS 2025d).

3.1.5 Montane Hardwood

A total of 354.5 acres of the Montane Hardwood habitat type (23.9 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Canopy cover in the Montane Hardwood habitat type was generally moderate to dense and was dominated by interior live oak; associated species included blue oak and black oak (*Quercus kelloggii*), and occasionally grey pine and ponderosa pine. Cover in the shrub canopy was moderately dense and of high stature, and included whiteleaf manzanita, black oak saplings, and toyon, with occasional cover of coast silk-tassel and mountain mahogany (*Cercocarpus betuloides*). Where the tree canopy was open, the shrub layer was generally dense. The herbaceous layer was sparse to moderate in areas of no shrub cover and included nonnative species such as wild oats and soft brome. In areas of high shrub cover, the herbaceous layer was generally sparse. Invasive cover was generally low and occasionally included Scotch broom (*Cytisus scoparius*) in the shrub layer. The species that dominate the Montane Hardwood habitat with the potential to occur within the Project Area do not correspond to any sensitive natural communities.

3.1.6 Montane Hardwood-Conifer

A total of 323.0 acres of the Montane Hardwood-Conifer habitat type (21.8 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Tree cover in the Montane Hardwood-Conifer habitat type was generally dense and of high stature, including interior live oak, black oak, and ponderosa pine. Other native tree species characteristically present included pacific madrone (*Arbutus menziesii*), blue oak, grey pine, Douglas-fir (*Pseudotsuga menziesii*), and sugar pine (*Pinus lambertiana*). Cover in the shrub canopy was moderate to low, frequently including native shrub species whiteleaf manzanita, blue oak, and interior live oak.

The herbaceous layer supported only trace cover. Invasive cover was generally low and occasionally included Scotch broom in the shrub layer. The species that dominate the Montane Hardwood-Conifer habitat with the potential to occur within the Project Area do not correspond to any sensitive natural communities.

3.1.7 Ponderosa Pine

A total of 284.9 acres of the Ponderosa Pine habitat type (19.2 percent of the Project Area) was documented within the Project Area (Table 1, Figure 2 and Figure 3). Tree cover in the Ponderosa Pine habitat type was generally moderate to dense, of high stature, and dominated by the native tree ponderosa pine with a mosaic of other native hardwood and coniferous trees including sugar pine, incense cedar, black oak, and Douglas-fir. Cover in the shrub canopy was generally sparse and of low stature, including California coffeeberry (*Frangula californica*). The herbaceous layer supported only trace cover. Invasive cover was low and occasionally included Scotch broom in the shrub layer. The species that dominate the Ponderosa Pine habitat with the potential to occur within the Project Area do not correspond to any sensitive natural communities.

3.2 Special-status Plants

Of the 21 special-status plant species previously documented in the Project Region (Appendix A), four species had no suitable habitat within the Project Area or occurred outside the elevation threshold of the Project Area and one species was considered unlikely to occur within the Project Area due to marginally suitable habitat. The remaining 16 special-status plant species had the potential to occur within the Project Area (Table 2), five of which had been previously documented within the Project Area (CDFW 2024b).

Protocol-level surveys were not conducted during the habitat assessment. A species that could be chapparal sedge (*Carex xerophila*) was observed during the reconnaissance-level survey but it could not be definitely identified since the reproductive parts required for identification were not present due to timing of the reconnaissance-level survey.

Table 2. Special-status plants with the potential to occur within the Project Area[1].

Scientific name	Common name	Status[2] (Federal/ State/ CRPR)	Lifeform
Vascular plant species			
Calycadenia spicata	**spicate calycadenia**	**–/–/1B.3**	**annual herb**
Calystegia stebbinsii[2]	**Stebbins' morning–glory**	**FE/CE/1B.1**	**perennial rhizomatous herb**
Carex cyrtostachya	Sierra arching sedge	–/–/1B.2	perennial herb
Carex xerophila	**chaparral sedge**	**–/–/1B.2**	**perennial herb**
Chlorogalum grandiflorum	Red Hills soaproot	–/–/1B.2	perennial bulbiferous herb
Clarkia mosquinii	Mosquin's clarkia	–/–/1B.1	annual herb
Fremontodendron decumbens	**Pine Hill flannelbush**	**FE/CR/1B.2**	**perennial evergreen shrub**
Juncus digitatus	finger rush	–/–/1B.1	annual herb
Lewisia cantelovii	Cantelow's lewisia	–/–/1B.2	perennial herb
Lycopodiella inundata	inundated bog–clubmoss	–/–/2B.2	perennial rhizomatous herb
Packera layneae	Layne's ragwort	FT/CR/1B.2	perennial herb
Poa sierrae	Sierra blue grass	–/–/1B.3	perennial rhizomatous herb
Rhynchospora capitellata	brownish beaked–rush	–/–/2B.2	perennial herb
Sidalcea stipularis	**Scadden Flat checkerbloom**	**1B.1/CE/–**	**perennial rhizomatous herb**
Viburnum ellipticum	oval–leaved viburnum	2B.3/–/–	perennial deciduous shrub
Non-vascular species			
Mielichhoferia shevockii	Shevock's copper moss	–/–/1B.2	moss

[1] Species that have been previously documented within the Project Area are bolded (CDFW 2024b).

[2] Status:

Federal

FE Federally listed as endangered

FT Federally listed as threatened

– No federal status

State

CE California listed as endangered

CR California listed as rare

– No state status

CRPR (California Rare Plant Rank) List Ranks

List 1B Plants rare, threatened, or endangered in California and elsewhere

List 2B Plants rare, threatened, or endangered in California, but more common elsewhere

CRPR Threat Ranks

0.1 Seriously threatened in California (high degree/immediacy of threat)

0.2 Fairly threatened in California (moderate degree/immediacy of threat)

0.3 Not very threatened in California (low degree/immediacy of threats or no current threats known)

3.3 Special-status Wildlife

Of the 28 special-status fish and wildlife species that were identified from the database queries conducted for the Project (described in Section 2.4), 13 wildlife species have a moderate- to high-potential to occur within the Project Area (Table 3; see Appendix A, Table A-2 for further information on species identified to have a low or no likelihood of occurrence and excluded from further evaluation). Wildlife species incidentally observed during the 2024 reconnaissance-level survey were recorded (Appendix B).

Table 3. Special-status wildlife with a medium or high potential to occur within the Project Area.

Common name *Scientific name*	**Status[1] (Federal / State)**	**Distribution in California**	**Habitat association**	**Likelihood to occur in Survey Area**
Invertebrates				
Western bumble bee *Bombus occidentalis*	–/SCE	Historically common throughout northern California south to Santa Barbara County (except the central Valley). The current range includes parts of northern California and the northern and central Sierra Nevada Mountains and foothills.	Forages on flowering plants in chaparral scrub, shrubby areas, open grasslands, forested openings, mountain meadows, and urban parks and gardens. Host plant genera include, but are not limited to, buckbrush (*Ceanothus* spp.), knapweed (*Centaurea* spp.), rabbitbrush (*Chrysothamnus* spp.), thistle (*Cirsium* spp.), wild buckwheat (*Eriogonum* spp.), geranium (*Geranium* spp.), gumweed (*Grindelia* spp.), lupine (*Lupinus* spp.), sweet clover (*Melilotus* spp.), wild mint (*Monardella* spp.), blackberry (*Rubus* spp.), goldenrod (*Solidago* spp.), and clover (*Trifolium* spp.). Nests underground in pre-existing cavities (abandoned small mammal burrows) but can also nest above ground in grass tussocks, brush piles, fallen logs, and human-made structures.	**Moderate** Suitable habitat is present within the Project Area, including Annual Grass and Mixed Chaparral habitat types as well as openings in the forested habitat types. Host plants observed within the Project Area during the 2024 reconnaissance-level survey included *Ceanothus* spp., *Rubus* spp., *and Centaurea* spp. The Project Area is within the current range of the species, with recent bee observations from 2023 and 2024 between 15–20 miles from the Project (Xerces Society 2024), while the closest observation from California Natural Diversity Database (CNDDB) is from 1968 (CDFW 2024b).

Common name ***Scientific name***	**Status[1] (Federal / State)**	**Distribution in California**	**Habitat association**	**Likelihood to occur in Survey Area**
Monarch butterfly *Danaus plexippus*	FPT/–	Range includes most of California; it breeds throughout California and overwinters in suitable groves along the California coast	Adults forage on a variety of flowering plants during breeding and migration; larvae (caterpillars) require milkweed (*Asclepias* spp.) as a host plant. Overwintering roosts include eucalyptus (*Eucalyptus* sp.), Monterey pine (*Pinus radiata*), and Monterey cypress (*Cupressus macrocarpa*) trees.	**Moderate** The Project Area may support breeding and foraging on flowering plants. While milkweed was not observed during the winter 2024 reconnaissance-level survey, if it is present during the spring and summer months, it has the potential to support breeding habitat. The Project is outside of the overwintering range. Both monarch butterflies and milkweed have been documented in 2019 about 3.6 miles from the Project Area (Western Monarch and Milkweed Occurrence Database 2024). The most recent CDFW occurrence is from 1979 and is more than 80 miles from Project Area (CDFW 2024b).
Amphibians				
Foothill yellow-legged frog, North Sierra clade *Rana boylii*	–/ST	Sutter County and the following watershed subbasins in Nevada, Placer, Sierra, and Yuba counties: Lower American, North Fork American, Upper Bear, Upper Coon-Upper Auburn, and Upper Yuba	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate	**Moderate** Suitable habitat (intermittent and perennial streams) is present. The intermittent streams in Phase 1 may provide dispersal and refuge habitat, while breeding habitat is absent. In Phase 2, the perennial Deer Creek provides habitat for rearing and basking; while it is uncertain if the site supports breeding habitat as the site was inaccessible during the 2024 reconnaissance-level survey. Adults have been observed in 2018 less than a mile from the Project Area basking at Squirrel Creek (CDFW 2024b).

Common name ***Scientific name***	**Status[1] (Federal / State)**	**Distribution in California**	**Habitat association**	**Likelihood to occur in Survey Area**
California red-legged frog *Rana draytonii*	FT/SSC	Largely restricted to coastal drainages on the central coast from Mendocino County to Baja California; in the Sierra foothills south to Tulare and possibly Kern counties	Breeds in still or slow-moving water with emergent and overhanging vegetation, including wetlands, wet meadows, ponds, lakes, and low-gradient, slow moving stream reaches with permanent pools; uses adjacent uplands for dispersal and summer retreat	**Moderate** The current range for the species overlaps with the Project Area (USFWS 2024a) and suitable habitat such as ponds and slow-moving water with emergent and overhanging vegetation is present within the Project Area. The closest observation is from 2006 at about 19 miles from Project Area (CDFW 2024b). Critical habitat for this species is located about 6 miles from Project Area (CDFW 2024b).
Reptiles				
Northwestern pond turtle *Actinemys marmorata*	FPT/SSC	Range extends to the Oregon border and includes the coast ranges to the northern San Francisco Bay area as well as the Central Valley, Cascades, and Sierras	Permanent, slow-moving fresh or brackish water with available basking sites and adjacent open habitats or forest for nesting	**Moderate** While many of the streams within the Project Area are not perennial, there is at least one creek (Deer Creek) that is perennial, supports basking habitat, and may act as a migration corridor for the species. Slow-moving water and ponds are present, albeit lacking basking habitat (i.e., logs). Habitat adjacent to the ponds include open and forested habitats, which may support nesting. Observation from 2015, less than 8 miles from Project Area (CDFW 2024b).
Coast horned lizard *Phrynosoma blainvillii*	SSC	West of deserts and Cascade-Sierran highlands, as far north as Shasta Reservoir	Found in grasslands, coniferous forests, woodlands, and chaparral amongst open or low vegetation and patches of loose sandy soil such as along dirt roads and sandy washes; forages on ants at ant hills	**Moderate** Suitable habitat within the Project Area includes the Annual Grass, Mixed Chaparral and Montane Hardwood-Conifer habitat types with open areas and patches of loose soil. Scattered shrubs along dirt roads are present within the Project Area. The species was observed within and near the Project Area about 30 years ago, in the early and mid-1990's (CDFW

Common name *Scientific name*	**Status[1] (Federal / State)**	**Distribution in California**	**Habitat association**	**Likelihood to occur in Survey Area**
				2024b). Viewing historical satellite imagery, the overall habitat associations are similar to present day.
Birds				
Bald eagle *Haliaeetus leucocephalus*	FD, BGEPA/ SE, SFP	Species is a permanent resident and uncommon winter migrant, found nesting primarily in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity counties	Large bodies of water or rivers with abundant fish, uses snags or other perches; nests in advanced-successional conifer forest near open water	**Moderate** (flyover only) While the potential for this species to fly through the Project Area is high, there is a low potential for the eagle to be present nesting or foraging. Nesting habitat is lacking within the Project Area and the small bodies of water (small to medium-sized ponds) are not large enough to support foraging for the species. The closest foraging locations include Lake Wildwood, which is located about 2.8 miles from the Project Area, and the Yuba River, which is about 8 miles away. There are numerous observations of the species within 10 miles of the Project Area, with the closest observation from 2022 at about 0.6 miles from Project Area (eBird 2024). The closest occurrence in CNDDB is from 2001 more than 12 miles from the Project Area (CDFW 2024b).
Long-eared owl *Asio otus*	–/SSC	Uncommon resident throughout the state, does not occupy the Central Valley and Southern California deserts	Riparian habitat; nests in dense vegetation close to open grassland, meadows, riparian, or wetland areas for foraging	**Moderate** Suitable nesting and foraging habitat is present within the Project Area. The closest CNDDB observation is from 1993 about 10 miles from the Project Area (CDFW 2024b), with more recent sightings over the last 10 years about 15 miles away (eBird 2024).

Common name ***Scientific name***	**Status[1] (Federal / State)**	**Distribution in California**	**Habitat association**	**Likelihood to occur in Survey Area**
Yellow warbler *Setophaga petechia*	–/SSC	Summer resident; nests in most of California, except most of the Central Valley, high Sierras, and Mojave and Colorado deserts	Deciduous riparian woodland with an open canopy and close to water, along streams or wet meadows	**High** Suitable habitat is present within the Project Area within the deciduous riparian woodlands near streams and wet areas (i.e., ponds). The closest two occurrences are from 2018 and 2019 less than two miles from the Project Area (eBird 2024), and the most recent CNDDB occurrence is from 1994 about 10 miles from the Project Area (CDFW 2024b).
Yellow-breasted chat *Icteria virens*	–/SSC	Uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada	Early-successional riparian habitats with a dense shrub layer and an open canopy	**Moderate** Suitable riparian habitat is present within the Project Area. Recent occurrences are from 2021 about 2 miles from Project Area (CDFW 2024b); in 2017 less than a mile away and in 2019 about 1.5 miles away (eBird 2024).
Grasshopper sparrow *Ammodramus savannarum*	–/SSC	Summer resident; nests in Mendocino, Trinity, and Tehama counties south, west of the Cascade–Sierra Nevada axis and southeastern deserts, to San Diego County	Typically found in moderately open grasslands with scattered shrubs	**Moderate** Suitable habitat (i.e., Annual Grass) is present, while not abundant within the Project Area. While the Project Area is located just outside of the documented breeding range, the species was documented in 2018 about 4.5 miles from the Project Area (eBird 2024) and in 1994 about 11 miles away (CDFW 2024b).
Numerous other bird species protected by the Migratory Bird Treaty Act (MBTA)	MBTA	Range encompasses California	Variable including, but not limited to, grasses, shrubs, and trees	**High** Birds protected under the MBTA have been documented within the Project Area during the 2024 winter reconnaissance-level survey (e.g., spotted towhee, black phoebe, northern flicker) and near the Project Area previously (e.g., American crow, acorn woodpecker,

Common name *Scientific name*	**Status[1] (Federal / State)**	**Distribution in California**	**Habitat association**	**Likelihood to occur in Survey Area**
				California quail, western meadow lark, and savannah sparrow; eBird 2024).

Common name *Scientific name*	Status[1] (Federal / State)	Distribution in California	Habitat association	Likelihood to occur in Survey Area
Mammals				
Western red bat *Lasiurus frantzii*	–/SSC	Near the Pacific Coast, Central Valley, and the Sierra Nevada	Roosts in foliage, primarily in riparian trees, such as sycamores and cottonwoods, while less in shrubs; woodlands near streams, fields and orchards; feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands	**Moderate** Roosting habitat includes cottonwoods and other riparian trees and foraging habitat is present throughout (shrublands, open woodlands and forests, and some grasslands). The species was documented in 2006 about 10 miles from Project Area (CDFW 2024b).
Townsend's big-eared bat *Corynorhinus townsendii*	–/SSC	Throughout California, found in all but subalpine and alpine habitats; details of distribution not well known	Roosts in cavities, most often in tunnels, caves, mines, and buildings, but also rock shelters, preferentially close to water; forages in the riparian zone and along creeks and river drainages	**Moderate** Roosting habitat is present at barns and other buildings; however, their preferred roosting areas of caves and mines are not known to be present within the Project Area. Foraging habitat is present in upland open grasslands within the Project Area. Documented acoustically in July 2022 about 1 mile from the Project Area (Conservation Biology Institute and USDA Forest Service 2025). The species was also documented in 2017 about 4–5 miles from the Project Area and in 2015 about 2–3 miles from Project Area (CDFW 2024b).

[1] Status codes:

Federal

FT = Listed as threatened under the federal Endangered Species Act
FPT = Federally proposed as threatened
FD = Federally delisted
BGEPA = Federally protected under the Bald and Golden Eagle Protection Act
MBTA = Migratory Bird Treaty Act

State

SE = Listed as Endangered under the California Endangered Species Act
ST = Listed as Threatened under the California Endangered Species Act
SCE = State Candidate Endangered
SSC = CDFW Species of Special Concern
SFP = CDFW Fully Protected species

4 POTENTIAL ENVIRONMENTAL EFFECTS & RELEVANT STANDARD PROJECT REQUIREMENTS

To assess the potential effects of Project activities on special-status species and sensitive natural communities with the potential to occur within the Project Area (Section 3.1–3.3), the Project description (Section 1), Biological Resources SPRs and MMs from the CalVTP PEIR (Appendix D), and life history information were reviewed.

4.1 Vegetation and Habitat Types

Project activities have the potential to adversely affect sensitive natural communities (e.g., by habitat degradation or loss) and/or have undesirable effects on other protected habitat types (i.e., type conversion from loss of chaparral habitat [see Section 3.1.4] or habitat degradation [see Section 3.1.2]) that have the potential to occur within the Project Area. Table 4 summarizes potential Project-related effects on sensitive natural communities and protected vegetation communities documented within the Project Area, with recommended SPRs. With the implementation of SPRs and MMs required by the CalVTP PEIR, Project-related effects on sensitive natural communities and protected vegetation habitat types would be avoided.

Table 4. Potential Project-related effects on sensitive natural communities and protected vegetation communities documented within the Project Area and recommended measures to reduce impacts on these communities.

Vegetation community	Status[1]	Potential Project-related effects	Proposed Avoidance Period	Recommended Standard Project Requirements (SPRs[2]) and Minimization Measures (MMs)	Potential Project-related effects following implementation of SPRs and MMs
Chaparral	None[3]	Yes. Removal of canopy (by machine and/or hand work) has the potential to reduce habitat quality and lead to type conversion.	N/A	**SPR BIO-3** (Survey Sensitive Natural Communities and Other Sensitive Habitats) in combination with **SPR BIO-1(1)** would identify stands of chaparral. **SPR BIO-5** (Maintain Habitat Function in Chaparral) would avoid type conversion and loss of habitat for identified stands. Treatments would be designed to retain the canopy in a patchwork pattern such that openings would regenerate from mature stands.	None
Oak Woodlands			N/A	**SPR BIO-3** (Survey Sensitive Natural Communities and Other Sensitive Habitats) in combination with **SPR BIO-1(1)** would identify stands of oaks. **MM BIO-3a** (Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands) would ensure that habitat function is maintained or improved by restoring the natural fire regime and returning vegetation composition and structure to their natural condition. **SPR BIO-3** (Prevent Spread of Plant Pathogens) would prevent the spread of *Phytopthora* and other plant pathogens.	
Ultramafic cypress woodlands (*Hesperocyparis* [*sargentii*, *macnabiana*] Woodland Alliance)	S3		N/A	**SPR BIO-3** (Survey Sensitive Natural Communities and Other Sensitive Habitats) in combination with **SPR BIO-1(1)** would identify stands of ultramafic cypress woodlands. **MM BIO-3a** (Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands) would ensure that habitat function is maintained or improved by restoring the natural fire regime and returning vegetation composition and structure to their natural condition. **SPR BIO-3** (Prevent Spread of Plant Pathogens) would prevent the spread of *Phytopthora* and other plant pathogens.	None

[1] Status (CDFW 2023):

S3 Vulnerable.

[2] Full descriptions of the SPRs are provided in Appendix C.

[3] The CalVTP PEIR requires that all chaparral communities be considered for Project-related effects of habitat loss and type conversion. State Bill 1260, which is a statutory issue separate from CEQA compliance, prohibits type conversion in chaparral and coastal sage scrub.

4.2 Special-status Plants

Project activities have the potential to directly affect (e.g., by damaging or decimating) or indirectly affect (e.g., by degrading habitat) special-status plant species with the potential to occur within the Project Area. Table 5 summarizes potential Project effects on the 16 special-status plant species with the potential to occur within the Project Area and recommended SPRs. With the implementation of SPRs and MMs required by the CalVTP PEIR, Project-related effects on special-status plant species would be avoided.

Table 5. Potential effects on special-status plants with the potential to occur within the Project Area and recommended measures to reduce impacts on these species.

Scientific name	Common name	Status[1] (Federal/ State/ CRPR)	Potential Project-related effects	Proposed Avoidance Period	Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)	Potential Project-related effects following implementation of SPRs and MMs?
Annual species						
Calycadenia spicata	spicate calycadenia	–/–/1B.3	Yes. Mastication, machinery, and herbicide have the potential to impact a reproductive cycle if conducted outside of the October 1–March 31 dormant period[3] but disturbance during the dormant period is generally beneficial to subsequent generations of annual species. Pile burning has the potential to be fatal to seeds in the ground, which would impact the population for subsequent generations.	April 1–September 30	**SPR BIO-1(1)(b)** (Review and Survey Project-Specific Biological Resources; Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) would avoid impacts by conducting treatment during the dormant period. **SPR BIO-7** (Survey for Special-Status Plants) in the appropriate phenological period for identification (i.e., May) within targeted areas in which pile burning would be conducted (i.e., existing roads or landings) would determine presence or absence, and any present would be flagged for avoidance per **SPR BIO-1(1).**	None
Clarkia mosquinii	Mosquin's clarkia	–/–/1B.1				
Juncus digitatus	finger rush	–/–/1B.1				
Wetland and riparian species						
Carex cyrtostachya	Sierra arching sedge	–/–/1B.2	Yes; mastication and machinery have the potential to impact these species if conducted within wetlands and riparian areas and herbicide has the potential to be fatal to these species.	N/A	The combination of **SPR HYD-4** (Identify and Protect Watercourse and Lake Protection Zones) which would establish buffers from watercourses based on slope, as well as **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure there is no mortality or loss of habitat for the species.	None
Lycopodiella inundata	inundated bog-clubmoss	–/–/2B.2				
Mielichhoferia shevockii	Shevock's copper moss	–/–/1B.2				
Rhynchospora capitellata	brownish beaked-rush	–/–/2B.2				
Sidalcea stipularis	Scadden Flat checkerbloom	–/CE/1B.1				
Shrub species						
Fremontodendron decumbens	Pine Hill flannelbush	FE/CR/1B.2	Yes, mastication and machinery have the potential to trim vegetative growth to an extent that the plants are non-reproductive for several seasons but would recover from basal nodes; herbicide has the potential to be fatal to these species; and pile burning has the potential to heat the ground to a temperature and depth that could destroy root structures.	N/A	**SPR BIO-7** (Survey for Special-Status Plants) in the appropriate phenological period for identification (i.e., May) would be implemented as required for any CESA- or ESA-listed species to determine presence or absence within suitable habitat (i.e., rocky areas of Mixed Chaparral and Montane Hardwood); any present would be flagged for avoidance per **SPR BIO-1(1).** **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **MM BIO-1c** (Compensate for Unavoidable Loss of Special-Status Plants) would be implemented if the species cannot be avoided.	None
Viburnum ellipticum	oval-leaved viburnum	–/–/2B.3		April–August	**SPR BIO-1(1)(b)** (Review and Survey Project-Specific Biological Resources; Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) would avoid impacts by conducting treatment during the dormant period (i.e., when the species can feasibly recover by resprouting; September–March). **SPR BIO-7** (Survey for Special-Status Plants) in the appropriate phenological period for identification (i.e., May) within targeted areas in which pile burning would be conducted (i.e., existing roads or landings), and any present would be flagged for avoidance per **SPR BIO-1(1).**	

Scientific name	Common name	Status[1] (Federal/ State/ CRPR)	Potential Project-related effects	Proposed Avoidance Period	Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)	Potential Project-related effects following implementation of SPRs and MMs?
					SPR BIO-2 (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **MM BIO-1c** (Compensate for Unavoidable Loss of Special-Status Plants) would be implemented if the species cannot be avoided.	
Perennial herb species						
Calystegia stebbinsii	Stebbins' morning-glory	FE/CE/1B.1	Yes; mastication and machinery have the potential to impact plants to an extent that the plants are non-reproductive for approximately one season; herbicide has the potential to be fatal to these species; and pile burning has the potential to heat the ground to a temperature and depth that could destroy root structures.	N/A	**SPR BIO-7** (Survey for Special-Status Plants) in the appropriate phenological period for identification (i.e., May) would be implemented as required for any CESA- or ESA-listed species (i.e., Stebbins' morning-glory, Layne's ragwort) to determine presence or absence within suitable habitat (i.e., Mixed Chaparral and Montane Hardwood); any present would be flagged for avoidance per **SPR BIO-1(1).** **SPR BIO-7** (Survey for Special-Status Plants) in the appropriate phenological period for identification (i.e., May) would be implemented for other special-status plants not listed under CESA or ESA to determine presence or absence within targeted areas in which pile burning would be conducted (i.e., existing roads or landings) unless at least two survey visits during a normal weather year, have been completed in the ~~last~~ 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey; and any present would be flagged for avoidance per **SPR BIO-1(1).** **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **MM BIO-1c** (Compensate for Unavoidable Loss of Special-Status Plants) would be implemented if the species cannot be avoided.	None
Carex xerophila	chaparral sedge	–/–/1B.2				
Chlorogalum grandiflorum	Red Hills soaproot	–/–/1B.2				
Lewisia cantelovii	Cantelow's lewisia	–/–/1B.2				
Packera layneae	Layne's ragwort	FT/CR/1B.2				
Poa sierrae	Sierra blue grass	–/–/1B.3				

[1] Status:

Federal

FE Federally listed as endangered

FT Federally listed as threatened

– No federal status

State

CE California listed as endangered

CR California listed as rare

– No state status

CRPR (California Rare Plant Rank) List Ranks

List 1B Plants rare, threatened, or endangered in California and elsewhere

List 2B Plants rare, threatened, or endangered in California, but more common elsewhere

CRPR Threat Ranks

0.1 Seriously threatened in California (high degree/immediacy of threat)

0.2 Fairly threatened in California (moderate degree/immediacy of threat)

0.3 Not very threatened in California (low degree/immediacy of threats or no current threats known)

[2] Full descriptions of the SPRs are provided in Appendix C.

[3] October 1 through March 31 is the combined dormant period for these three species.

4.3 Special-status Wildlife

Project activities have the potential to directly affect (e.g., injury or mortality) or indirectly affect (e.g., by disrupting normal behavior, modifying habitat suitability) special-status wildlife species that have the potential to occur within the Project Area. Table 6 summarizes potential Project effects on the 13 species with a moderate to high potential to occur, their sensitive life history timing, and recommended SPRs and one recommended Avoidance and Minimization Measure (AMM). With the implementation of these SPRs and MMs required by the CalVTP PEIR, Project-related effects on special-status wildlife species would be avoided.

Table 6. Potential Project-related effects on special-status wildlife with a medium or high potential to occur within the Project Area and recommended measures to reduce impacts on the species.

Common name *Scientific name*	**Status[1] (Federal/ State)**	**Sensitive life history timing**	**Potential Project-related effects on the species and habitats**	**Proposed Avoidance Period**	**Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)**	**Potential Project-related effects on the species and habitat following implementation of SPRs and MMs.**
Invertebrates						
Western bumble bee *Bombus occidentalis*	–/SCE	Colony active period: April–September	Yes—If a colony is present in target habitat types (i.e., Annual Grass and Mixed Chaparral habitat types, openings in forests), forest management activities such as ground disturbance (e.g., driving or use of heavy machinery in undisturbed areas) have the potential to directly harm or kill individuals or the colony if disturbance occurs during the active period. It is anticipated that individuals flying/foraging would move away from potential harm.	April–September	If activities occur during the colony active period (April–September), implement **SPR BIO-10** (Survey for Special-Status Wildlife and Nursery Sites), in response to **SPR BIO-1** (1) (Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) which would identify suitable habitat and location in which to survey (i.e., Annual Grass and Mixed Chaparral habitat types, openings in forests), and establish avoidance buffers if a colony is present. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **SPR BIO-5** (Maintaining Habitat Function in Chaparral) would avoid type conversion where chaparral is present and avoid the loss of habitat for wildlife species that depend on this habitat type. **SPR GEO-2** (Limit High Ground Pressure Vehicles) would minimize soil disturbance, compaction, and/or damage to soil structure to protect ground nesting habitat.	None
Monarch butterfly *Danaus plexippus*	FPT/–	Breeding season: March through October	Yes—Forest management activities have the potential to affect breeding habitat (milkweed) if it is removed or disturbed, and larvae would be directly harmed or killed if milkweed is disturbed during the breeding season.	March–October	If activities occur during the breeding season (March–October), implement **SPR BIO-10** (Survey for Special-Status Wildlife and Nursery Sites) in response to **SPR BIO-1 (1)** (Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) which would identify suitable habitat and location in which to survey (i.e., grasslands and roadsides), and establish avoidance buffers if a breeding habitat (i.e., milkweed) is present. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided.	None
Amphibians						
Foothill yellow-legged frog, North Sierra clade *Rana boylii*	–/ST	Breeding: Foothill yellow-legged frog breeding (oviposition) typically begins in spring and eggs generally hatch within 5–37 days, depending on water temperatures. Tadpoles generally metamorphose within 3–4 months after hatching.	Yes—Mobilization of sediment, as a result of ground disturbance near waterways, has the potential to affect water quality and the survival and health of eggs, tadpoles, juveniles, and adults. Forest management activities that occur within the riparian corridor, adjacent to the stream, and/or in the immediately adjacent uplands have the potential to result in direct injury or mortality of juveniles and adults.	N/A	The combination of **SPR HYD-4** (Identify and Protect Watercourse and Lake Protection Zones) which would establish buffers from watercourse based on slope and **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure that any treatment in wetland/riparian areas would not lead to injury or mortality or to a loss of habitat for the species (i.e. no removal of large riparian tree species, no loss of stream shading, hand removal only, etc.). **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided.	None

Common name *Scientific name*	Status[1] (Federal/ State)	Sensitive life history timing	Potential Project-related effects on the species and habitats	Proposed Avoidance Period	Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)	Potential Project-related effects on the species and habitat following implementation of SPRs and MMs.
					SPR BIO-9 (Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife) would include decontaminating all equipment, gear, and clothing to protect amphibians from chytrid fungus disease.	
California red-legged frog *Rana draytonii*	FT/SSC	Breeding: Occurs between late November and late April with eggs hatching within 6–14 days. Tadpoles require approximately 11–20 weeks to metamorphose, generally from May to September, although overwintering by California red-legged frogs has been documented at non-forested breeding sites.	Yes—Mobilization of sediment, as a result of ground disturbance near waterways, has the potential to affect water quality and the survival and health of eggs, tadpoles, juveniles, and adults. Forest management activities that occur within the riparian corridor, adjacent to the stream, and/or in the immediately adjacent uplands have the potential to result in direct injury or mortality of juveniles and adults.	N/A	The combination of **SPR HYD-4** (Identify and Protect Watercourse and Lake Protection Zones) which would establish buffers from watercourse based on slope and **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure that any treatment in wetland/riparian areas would not lead to injury or mortality or to a loss of habitat for the species (i.e. no removal of large riparian tree species, no loss of stream shading, hand removal only, etc.). **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **SPR BIO-9** (Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife) would include decontaminating all equipment, gear, and clothing to protect amphibians from chytrid fungus disease.	None
Reptiles						
Northwestern pond turtle *Actinemys marmorata*	FPT/SSC	Breeding: Adults typically dig a hole (nests) and lay eggs from late April through mid-July at low elevation, and June through August at higher elevations. While peak egg laying occurs in June and July, eggs may be laid throughout the year. Hatchlings emerge in late summer or fall. Overwintering: late fall through early spring	Yes— Forest management activities that occur within the riparian corridor, adjacent to a waterway, have the potential to result in direct injury or mortality of individuals. Ground disturbance in upland habitats within the riparian buffers has the potential to directly affect upland nesting and hibernating habitat, which has the potential to cause mortality to incubating eggs and individuals.	May–August	**SPR BIO-1(1)(b)** (Review and Survey Project-Specific Biological Resources; Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) would reduce potential impacts by conducting treatment within the sensitive areas (i.e., riparian corridors) outside of the egg laying season (i.e., May through August). The combination of **SPR HYD-4** (Identify and Protect Watercourse and Lake Protection Zones) which would establish buffers from watercourse based on slope. and **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure that any treatment in wetland/riparian areas would not lead to injury or mortality or to a loss of habitat for the species (i.e. no removal of large riparian tree species, no loss of stream shading, hand removal only, etc.). **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **SPR GEO-2** (Limit High Ground Pressure Vehicles) would minimize soil disturbance, compaction, and/or damage to soil structure to protect ground nesting habitat.	None

Common name ***Scientific name***	**Status[1]** **(Federal/ State)**	**Sensitive life history timing**	**Potential Project-related effects on the species and habitats**	**Proposed Avoidance Period**	**Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)**	**Potential Project-related effects on the species and habitat following implementation of SPRs and MMs.**
Coast horned lizard *Phrynosoma blainvillii*	SSC	Breeding: May–June with eggs hatching from August–September. Potential to lay two clutches in one year. Overwintering: October–April. Spent burrowed in the soil under surface objects such as logs, rocks, mammal burrows, or in crevices.	Yes—Ground disturbance has the potential to directly affect foraging (ant hills), nesting, and hibernating habitat which would cause injury or mortality to individuals and incubating eggs. Loss of target habitats (i.e., the Annual Grass, Mixed Chaparral and Montane Hardwood-Conifer habitat types) has the potential to affect individuals seeking refuge.	N/A	Implement **SPR BIO-10** (Survey for Special-Status Wildlife and Nursery Sites) in target habitat types, in response to **SPR BIO-1 (1)** (Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) which would identify suitable habitat and location in which to survey, and if present establish avoidance buffers. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of incidental sightings such that impacts would be avoided. **SPR BIO-5** (Maintaining Habitat Function in Chaparral) would avoid type conversion where chaparral is present and avoid the loss of habitat for wildlife species that depend on this habitat type. **SPR GEO-2** (Limit High Ground Pressure Vehicles) would minimize soil disturbance, compaction, and/or damage to soil structure to protect ground nesting habitat.	None
Birds						
Bald eagle *Haliaeetus leucocephalus*	FD, BGEPA/SE, SFP	Breeding season: February through August Nest building: typically 1 to 3 months before laying	No—Although individuals have the potential to fly over, no suitable nesting or foraging habitat present (Table 3).	N/A	None	None
Long-eared owl *Asio otus*	–/SSC	Breeding: Early March– late July. Eggs usually laid in April and May. Incubation and fledging period: 21–30 days; fledge in about 50 days or less.	Yes—Removing trees particularly in the riparian habitat has the potential to result in direct mortality to nesting individuals, including eggs and young, if present, and loss of nesting habitat.	early March–late July	**SPR BIO-12** (Protect Common Nesting Birds, Including Raptors) would exclude the nesting season or would identify suitable habitat and location in which to survey and if present establish avoidance buffers or modify/defer treatment, as appropriate. Any active or potential raptor nest trees would be retained. If an active nest tree is observed, the biologist would monitor the nest during treatment activities. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of sightings such that impacts would be avoided. **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure that any treatment in riparian areas would not degrade or lead to a loss of habitat for wildlife (i.e. no removal of large riparian tree species, no loss of stream shading, hand removal only, etc.).	None

Common name ***Scientific name***	**Status[1] (Federal/ State)**	**Sensitive life history timing**	**Potential Project-related effects on the species and habitats**	**Proposed Avoidance Period**	**Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)**	**Potential Project-related effects on the species and habitat following implementation of SPRs and MMs.**
Yellow warbler *Setophaga petechia*	–/SSC	Nesting bird season: February through August	Yes—Removing vegetation particularly in the riparian habitat has the potential to result in direct mortality to nesting individuals, including eggs and young, if present, and loss of nesting habitat.	February–August	**SPR BIO-12** (Protect Common Nesting Birds, Including Raptors) would exclude the nesting season or would identify suitable habitat and location in which to survey and if present establish avoidance buffers or modify/defer treatment, as appropriate. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of sightings such that impacts would be avoided. **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure that any treatment in riparian areas would not degrade or lead to a loss of habitat for wildlife (i.e. no removal of large riparian tree species, no loss of stream shading, hand removal only, etc.).	None
Yellow-breasted chat *Icteria virens*	–/SSC	Nesting bird season: March to late September	Yes—Removing vegetation particularly in the riparian habitat has the potential to result in direct mortality to nesting individuals, including eggs and young, if present, and loss of nesting habitat.	March–late September	**SPR BIO-12** (Protect Common Nesting Birds, Including Raptors) would exclude the nesting season or would identify suitable habitat and location in which to survey and if present establish avoidance buffers or modify/defer treatment, as appropriate. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of sightings such that impacts would be avoided.	None
Grasshopper sparrow *Ammodramus savannarum*	–/SSC	Nesting bird season: mid-March through August; late spring migrants arriving in late April–early May	Yes—Ground disturbance within open habitats hast the potential to result in direct impacts to breeding habitat, which would result in injury or mortality to individuals and eggs.	mid-March–August	**SPR BIO-12** (Protect Common Nesting Birds, Including Raptors) would exclude the nesting season or would identify suitable habitat and location in which to survey and if present establish avoidance buffers or modify/defer treatment, as appropriate. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of sightings such that impacts would be avoided.	None
Numerous other species, including but not limited to	MBTA	Nesting bird season: February through August	Yes—Removing vegetation and ground disturbance activities has the potential to result in direct mortality to nesting individuals, including eggs and young, if present, and loss of nesting habitat.	February–August	**SPR BIO-12** (Protect Common Nesting Birds, Including Raptors) would exclude the nesting season or would identify suitable habitat and location in which to survey and if present establish avoidance buffers or modify/defer treatment, as appropriate. **SPR BIO-2** (Require Biological Resource Training for Workers) would provide awareness to the workers in case of sightings such that impacts would be avoided.	None

Common name ***Scientific name***	**Status[1]** **(Federal/ State)**	**Sensitive life history timing**	**Potential Project-related effects on the species and habitats**	**Proposed Avoidance Period**	**Recommended Standard Project Requirements (SPRs)[2] and Minimization Measures (MMs)**	**Potential Project-related effects on the species and habitat following implementation of SPRs and MMs.**
Mammals						
Western red bat *Lasiurus frantzii*	–/SSC	Maternity season: May 1 through August 31	Yes—Removing riparian trees with foliage (roosting habitat), has the potential to result in mortality to bats, including non-volant young (young not able to fly).	May 1–August 31	**SPR BIO-1(1)(b)** (Review and Survey Project-Specific Biological Resources; Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided) would avoid impacts by conducting treatment within the sensitive areas (i.e., riparian zones) outside of the maternity season (i.e., May 1 through August 31). The combination of **SPR HYD-4** (Identify and Protect Watercourse and Lake Protection Zones) which would establish buffers from watercourse based on slope and **SPR BIO-4** (Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function) would ensure that any treatment in riparian areas would not lead to injury or mortality or to a loss of habitat for the species (i.e. no removal of large riparian tree species, no loss of stream shading, hand removal only, etc.).	None
Townsend's big-eared bat *Corynorhinus townsendii*	–/SSC	Maternity season: May 1 through August 31 Hibernating season: November 1 through March 31	No—Vegetation management activities would not affect barns/buildings and night-time foraging activities in upland habitats would not be affected since nighttime work would not be required.	N/A	None	None

[1] Status codes:

Federal

FT = Listed as threatened under the federal Endangered Species Act
FPT = Federally proposed as threatened
FD = Federally delisted
BGEPA = Federally protected under the Bald and Golden Eagle Protection Act
MBTA = Migratory Bird Treaty Act

State

SE = Listed as Endangered under the California Endangered Species Act
ST = Listed as Threatened under the California Endangered Species Act
SCE = State Candidate Endangered
SSC = CDFW Species of Special Concern
SFP = CDFW Fully Protected species

[2] Full descriptions of the SPRs are provided in Appendix C.

5 CONCLUSIONS

One sensitive natural community, one vegetation community in which type conversion is to be avoided, 16 special-status plant species, and 13 special-status wildlife species have the potential to occur within the Project Area. Two of the special-status wildlife species would not be affected by vegetation treatments (i.e., bald eagle, Townsend's big-eared bat). For the remaining, with the implementation of SPRs (Section 4) including refinements to some of the SPRs and one additional AMMs (Sections 5), adverse effects would be minimized and/or avoided.

6 REFERENCES

Ascent Environmental. 2019. California Vegetation Treatment Program, Final Program Environmental Impact Report. State Clearinghouse No. 2019012052. Prepared by Ascent Environmental, Sacramento, California for California Board of Forestry and Fire Protection, Sacramento, California.

CDFW (California Department of Fish and Wildlife). 2021. California Wildlife Habitat Relationship System, Version 10.*x.x*. [Accessed October 2024]. California Department of Fish and Wildlife, Biogeographic Data Branch, Sacramento, California.

CDFW. 2025a. Special vascular plants, bryophytes, and lichens list. Prepared by CDFW, Sacramento, California. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383

CDFW. 2025b. California Sensitive Natural Communities. Vegetation Classification and Mapping Program, California Department of Fish and Game, Sacramento, California. February 27. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609.

CDFW. 2024. California Natural Diversity Database (CNDDB). https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. California Department of Fish and Wildlife. [Accessed September 2024].

CNPS (California Native Plant Society). 2024. Inventory of Rare and Endangered Plants of California (online edition, v9.5). Website. http://www.rareplants.cnps.org/ [Accessed September 2024]. Prepared by CNPS, Sacramento, California.

CNPS. 2025a. A Manual of California Vegetation, Online Edition. Website. http://www.cnps.org/cnps/vegetation/ [Accessed February 2025]. Prepared by CNPS, Sacramento, California.

CNPS. 2025b. *Hesperocyparis* (*sargentii*, *macnabiana*) Woodland Alliance. A Manual of California Vegetation, Online Edition. Website. https://vegetation.cnps.org/alliance/591 [Accessed February 2025]. Prepared by CNPS, Sacramento, California.

CNPS. 2025c. *Quercus douglasii* Forest & Woodland Alliance. A Manual of California Vegetation, Online Edition. Website. https://vegetation.cnps.org/alliance/80 [Accessed February 2025]. Prepared by CNPS, Sacramento, California.

CNPS. 2025d. *Arctostaphylos viscida* Shrubland Alliance. A Manual of California Vegetation, Online Edition. Website. https://vegetation.cnps.org/alliance/133 [Accessed February 2025]. Prepared by CNPS, Sacramento, California.

Conservation Biology Institute and USDA Forest Service. 2025. Bat Acoustic Monitoring Visualization Tool. https://visualize.batamp.databasin.org/ [Accessed February 2025].

eBird. 2024. eBird: An online database of bird distribution and abundance. Website. http://www.ebird.org. [Accessed October 2024]. Prepared by eBird, Cornell Lab of Ornithology, Ithaca, New York.

iNaturalist. 2024. iNaturalist. Website. https://www.inaturalist.org. [Accessed December 2024].

Jennings, C. W., C. Gutierrez, W. Bryant, G. Saucedo, and C. Wills. 2010 Geologic Map of California, Geologic Data Map No. 2. Available at: https://gis.conservation.ca.gov/server/rest/services/CGS/Geologic_Map_of_California/MapServer/.

USDA Forest Service. 2024. CalVeg mapping data. Pacific Southwest Region, Remote Sensing Lab, McClellan, California. [Accessed October 2024].

USDA NRCS (U.S. Department of Agriculture Natural Resources Conservation Service). 2024. Web soil survey. Online SSURGO database. https://arcg.is/COOL9 [Accessed October 2024].

USFWS (U.S. Fish and Wildlife Service). 2024a. Information for Planning and Consultation (IPaC). online project planning tool. https://ecos.fws.gov/ipac/ [Accessed October 2024].

USFWS. 2024b. National Wetlands Inventory (NWI) wetlands and riparian polygon data. Geospatial wetlands data. USFWS, Arlington, Virginia. https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/ [Accessed October 2024].

Western Monarch and Milkweed Occurrence Database. 2024. Data accessed from the Western Monarch Milkweed Mapper, a project by the Xerces Society, U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and Washington Department of Fish and Wildlife. Available at: www.monarchmilkweedmapper.org. [Accessed October 2024].

Xerces Society. 2024. Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees. Available at: https://www.bumblebeewatch.org/. [Accessed: October 2024].

Appendices

Appendix A

Database Query Results for Special-status Species Documented in the Project Region

Table A-1. Database query results for special-status plants documented in the Project Region.

Scientific name	Common name	Status[1] (Federal/ State/ CRPR)	Source	Blooming period[2]	Elevation range[2] (feet)	Habitat associations[2]	Potential to occur in Survey Area?
Calycadenia spicata	spicate calycadenia	–/–/1B.3	CNPS, CNDDB	May–September	130–4,595	Dry disturbed areas, openings, or roadsides with adobe, clay, gravelly or rocky soils in cismontane woodland and valley and foothill grassland	Yes, previously documented within the Project Area (CDFW 2024)
Calystegia stebbinsii	Stebbins' morning–glory	FE/CE/1B.1	CNPS, CNDDB, iPAC	April–July	605–3,575	Openings in chapparal and cismontane woodland, sometimes in gabbroic seeps	Yes, previously documented within the Project Area (CDFW 2024)
Carex cyrtostachya	Sierra arching sedge	–/–/1B.2	CNPS, CNDDB	May–August	2,000–4,460	Mesic lower montane coniferous forest, marshes and swamps, meadows and seeps, and the margins of riparian forest	Yes, suitable habitat may be present within the Project Area
Carex xerophila	chaparral sedge	–/–/1B.2	CNPS, CNDDB	March–June	1,445–2,525	Gabbroic and serpentine areas in chaparral, cismontane woodland, and lower montane coniferous forest	Yes, previously documented within the Project Area (CDFW 2024)
Chlorogalum grandiflorum	Red Hills soaproot	–/–/1B.2	CNPS, CNDDB	(April) May–June	805–5,545	Gabbroic and serpentine soils in chaparral, cismontane woodland, and lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area
Clarkia mosquinii	Mosquin's clarkia	–/–/1B.1	CNPS, CNDDB	May–July (September)	605–4,890	Roadsides and rocky areas in cismontane woodland and lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area
Downingia pusilla	dwarf downingia	–/–/2B.2	CNPS, CNDDB	March–May	5–1,460	Mesic areas of valley and foothill grasslands and vernal pools	No, outside of elevation range for Project Area
Eriogonum umbellatum var. *ahartii*	Ahart's buckwheat	–/–/1B.2	CNPS, CNDDB	June–September	1,310–6,560	Openings, slopes and areas with serpentine soils in chaparral and cismontane woodland	No, suitable habitat (serpentine soils) is not present within the Project Area
Fissidens pauperculus	minute pocket moss	–/–/1B.2	CNPS, CNDDB	N/A	35–3,360	North Coast coniferous forests with damp coastal soil	Unlikely. Suitable habitat (North Coast coniferous forests) is not present within the Project Area
Fremontodendron decumbens	Pine Hill flannelbush	FE/CR/1B.2	CNPS, CNDDB, iPAC	April–July	1,395–2,495	Rocky areas in chaparral and cismontane woodland, sometimes gabbroic and serpentine soils.	Yes, previously documented within the Project Area (CDFW 2024)
Juncus digitatus	finger rush	–/–/1B.1	CNPS, CNDDB	(April) May–June	2,165–3,600	Openings in cismontane woodland, openings in lower montane coniferous forest, and xeric vernal pools	Yes, suitable habitat may be present within the Project Area
Lewisia cantelovii	Cantelow's lewisia	–/–/1B.2	CNPS, CNDDB	May–October	1,085–4,495	Granitic and mesic areas, as well as sometimes serpentine soils in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area
Lycopodiella inundata	inundated bog–clubmoss	–/–/2B.2	CNPS, CNDDB	June–September	15–3,280	Coastal bogs and fens, mesic lower montane coniferous forest, and lake margins of marshes and swamps	Yes, suitable habitat may be present within the Project Area
Mielichhoferia shevockii	Shevock's copper moss	–/–/1B.2	CNPS	N/A	2,460–4,595	Mesic, metamorphic, and rocky areas of cismontane woodland	Yes, suitable habitat may be present within the Project Area
Packera layneae	Layne's ragwort	FT/CR/1B.2	CNPS, CNDDB	April–August	655–3,560	Rocky areas in chaparral and cismontane woodland, sometimes gabbroic and serpentine soils	Yes, suitable habitat may be present within the Project Area
Poa sierrae	Sierra blue grass	–/–/1B.3	CNPS, CNDDB	April–July	1,200–4,920	Openings in lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area

Scientific name	Common name	Status[1] (Federal/ State/ CRPR)	Source	Blooming period[2]	Elevation range[2] (feet)	Habitat associations[2]	Potential to occur in Survey Area?
Pyrrocoma lucida	sticky pyrrocoma	–/–/1B.2	CNPS, CNDDB	July–October	2,295–6,400	Areas with alkaline or clay soils in Great Basin scrub, lower montane coniferous forest, and meadows and seeps	No, suitable habitat (alkaline clay) is not present within the Project Area
Rhynchospora capitellata	brownish beaked–rush	–/–/2B.2	CNPS, CNDDB	July–August	150–6,560	Mesic areas of lower montane coniferous forest, marshes and swamps, meadows and seeps, and upper montane coniferous forest	Yes, suitable habitat may be present within the Project Area

Scientific name	Common name	Status[1] (Federal/ State/ CRPR)	Source	Blooming period[2]	Elevation range[2] (feet)	Habitat associations[2]	Potential to occur in Survey Area?
Sidalcea stipularis	Scadden Flat checkerbloom	–/CE/1B.1	CNPS, CNDDB	July–August	2,295–2,395	Montane freshwater marshes and swamps	Yes, previously documented within the Project Area (CDFW 2024)
Viburnum ellipticum	oval–leaved viburnum	–/–/2B.3	CNPS	May–June	705–4,595	Chaparral, cismontane woodland, and lower montane coniferous forest	Yes, suitable habitat may be present within the Project Area
Wolffia brasiliensis	Brazilian watermeal	–/–/2B.3	CNPS, CNDDB	April–December	65–330	Shallow freshwater marshes and swamps	No, outside of elevation range for Project Area

[1] Status:

Federal

FE Federally listed as endangered

FT Federally listed as threatened

– No federal status

State

CE California listed as endangered

CR California listed as rare

– No state status

California Rare Plant Rank (CRPR)

1B Plants rare, threatened, or endangered in California and elsewhere

2B Plants rare, threatened, or endangered in California, but more common elsewhere

0.1 Seriously threatened in California (high degree/immediacy of threat)

0.2 Fairly threatened in California (moderate degree/immediacy of threat)

0.3 Not very threatened in California (low degree/immediacy of threats or no current threats known)

[2] CNPS (2024) unless otherwise cited.

Table A-2. Database query results for special-status fish and wildlife documented within the Project Region.

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
Invertebrates					
Vernal pool fairy shrimp *Branchinecta lynchi*	CDFW	FT/–	Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County	Vernal pools; also found in sandstone rock outcrop pools	**None**. No vernal pools or sandstone rock outcrop pools observed within the Project Area. Most recent and closest observation is from 2016 about 20 miles away from Project Area (CDFW 2024b). Critical habitat is about 17 miles from Project Area (CDFW 2024b).
Western bumble bee *Bombus occidentalis*	CDFW	–/SCE	Historically common throughout northern California south to Santa Barbara County (except the central Valley). The current range includes parts of northern California and the northern and central Sierra Nevada Mountains and foothills.	Forages on flowering plants in chaparral scrub, shrubby areas, open grasslands, forested openings, mountain meadows, and urban parks and gardens. Host plant genera include, but are not limited to, buckbrush (*Ceanothus* spp.), knapweed (*Centaurea* spp.), rabbitbrush (*Chrysothamnus* spp.), thistle (*Cirsium* spp.), wild buckwheat (*Eriogonum* spp.), geranium (*Geranium* spp.), gumweed (*Grindelia* spp.), lupine (*Lupinus* spp.), sweet clover (*Melilotus* spp.), wild mint (*Monardella* spp.), blackberry (*Rubus* spp.), goldenrod (*Solidago* spp.), and clover (*Trifolium* spp.). Nests underground in pre-existing cavities (abandoned small mammal burrows) but can also nest above ground in grass tussocks, brush piles, fallen logs, and human-made structures.	**Moderate**—see Section 3.3.1
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	CDFW	FT/–	Riparian habitat in the Central Valley below 915 m (3,000 ft), most commonly in lowlands between 0 and 152 m (500 feet)	Riparian and oak savanna habitats with host plant *Sambucus* sp. (blue elderberry)	**Low**. The Project Area ranges in elevation from 1,973–2,493 feet, which is at the uppermost elevation limit for this species. In addition, the USFWS current range for the species does not overlap with the Project Area; the current range is located about 7 miles to the west of the Project (USFWS 2024a), and final critical habitat for the species is located about 45 miles south of the Project Area (USFWS 2024a). The closest observation is from 2011 at about 22 miles from Project Area (CDFW 2024b).
Monarch butterfly *Danaus plexippus*	USFWS	FPT/–	Range includes most of California; it breeds throughout California and overwinters in suitable groves along the California coast	Adults forage on a variety of flowering plants during breeding and migration; larvae (caterpillars) require milkweed (*Asclepias* spp.) as a host plant. Overwintering roosts include eucalyptus (*Eucalyptus* sp.), Monterey pine (*Pinus radiata*), and Monterey cypress (*Cupressus macrocarpa*) trees.	**Moderate**—see Section 3.3.1

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
Fish					
North American green sturgeon: southern DPS *Acipenser medirostris*	CDFW	FT/–	San Francisco, San Pablo, Suisun, and Humboldt bays; Sacramento-San Joaquin Delta, Sacramento and Klamath rivers	Spawns in large freshwater river mainstem pools with cool water and cobble, clean sand, or bedrock substrate; in San Francisco Bay adults tend to utilize water depths less than 10 m (33 ft) to swim near the surface or forage along the sea floor.	**None**. Project Area is upstream of anadromous barriers. The closest observation is from 2020 in the Yuba River about 15–18 miles from Project Area (CDFW 2024b). Critical habitat is located about 8 miles from Project Area in the Yuba River.
Chinook salmon, Central Valley spring-run ESU *Oncorhynchus tshawytscha*	CDFW	FT/ST	Sacramento River and its tributaries (Deer, Mill, Antelope, Battle, Beegum, Butte, and Big Chico creeks and the Feather and Yuba rivers)	Low- to mid-elevation rivers and streams with cold water, clean gravel of appropriate size for spawning and adequate rearing habitat; typically rear in freshwater for one or more years before migrating to the ocean	**None**. Project Area is upstream of anadromous barriers. The closest observation is from 1997 at about 10 miles from Project Area (CDFW 2024b). Critical habitat is located about 8 miles from Project Area in the Yuba River (CDFW 2024b).
Steelhead, Central Valley DPS *Oncorhynchus mykiss irideus*	CDFW	FT/–	The Sacramento and San Joaquin Rivers and their tributaries	Rivers and streams with cold water, clean gravel of appropriate size for spawning, and suitable rearing habitat; typically rear in freshwater for one or more years before migrating to the ocean	**None**. Project Area is upstream of anadromous barriers. Critical habitat is located about 16 miles from the Project Area (CDFW 2024b).
Amphibians					
Western spadefoot *Spea hammondii*	USFWS	FPT/SSC	Near Redding, south throughout the Central Valley and nearby foothills; Coast Ranges south of Monterey Bay; and coastal southern California south of the Transverse Mountains and west of the Peninsular Mountains	Western spadefoot is found in California from near Redding south throughout the Central Valley and nearby foothills and through the Coast Ranges south of Monterey Bay. This species prefers areas with sparse vegetation and/or short grasses in sandy or gravelly soils, primarily in washes, river floodplains, alluvial fans, playas, and alkali flats. Spadefoots typically occur in grasslands, but they may also be found in valley-foothill hardwood woodlands, chaparral, or pine-oak woodlands.	**Low.** Phase 1 is outside of the known range of the species (USFWS 2024a). While there were some lesser preferred habitat types present in Phase 2, the primary habitat types were lacking (washes, river floodplains, alluvial fans, playas, and alkali flats). Observation of juvenile from 2023 about 17 miles from the Project Area (iNaturalist 2024).
Foothill yellow-legged frog, North Feather River clade *Rana boylii*	CDFW	FT/ST	The following subbasins in Butte, Lassen, Plumas, and Sierra counties: Butte Creek, East Branch of North Fork Feather, Honcut Headwaters-Lower Feather, Middle Fork Feather, and North Fork Feather	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate	**None**. This genetic clade does not overlap the Project Area. Observation from 1952 about 17 miles from Project Area (CDFW 2024b).
Foothill yellow-legged frog, North Sierra clade *Rana boylii*	CDFW	–/ST	Sutter County and the following watershed subbasins in Nevada, Placer, Sierra, and Yuba counties: Lower American, North Fork American, Upper Bear, Upper Coon-Upper Auburn, and Upper Yuba	Shallow tributaries and mainstems of perennial streams and rivers, typically associated with cobble or boulder substrate	**Moderate**—see Section 3.3.1

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
California red-legged frog *Rana draytonii*	CDFW, USFWS	FT/SSC	Largely restricted to coastal drainages on the central coast from Mendocino County to Baja California; in the Sierra foothills south to Tulare and possibly Kern counties	Breeds in still or slow-moving water with emergent and overhanging vegetation, including wetlands, wet meadows, ponds, lakes, and low-gradient, slow moving stream reaches with permanent pools; uses adjacent uplands for dispersal and summer retreat	**Moderate**—see Section 3.3.1

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
Reptiles					
Northwestern pond turtle *Actinemys marmorata*	CDFW, USFWS	FPT/SSC	Range is from the Oregon border along the coast ranges to the northern San Francisco Bay area as well as the Central Valley, Cascades, and Sierras	Permanent, slow-moving fresh or brackish water with available basking sites and adjacent open habitats or forest for nesting	**Moderate**—see Section 3.3.1
Coast horned lizard *Phrynosoma blainvillii*	CDFW	SSC	Historically found in California along the Pacific coast from the Baja California border west of the deserts and the Sierra Nevada, north to the Bay Area, and inland as far north as Shasta Reservoir. Ranges up onto the Kern Plateau east of the crest of the Sierra Nevada. The range has now been severely fragmented due to land alteration. Also occurs south of California in northwest Baja California. West of deserts and Cascade-Sierran highlands, as far north as Shasta Reservoir	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants.	**Moderate**—see Section 3.3.1
Birds					
Bald eagle *Haliaeetus leucocephalus*	CDFW	FD, BGEPA/SE, SFP	Species is a permanent resident and uncommon winter migrant, found nesting primarily in Butte, Lake, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Trinity counties	Large bodies of water or rivers with abundant fish, uses snags or other perches; nests in advanced-successional conifer forest near open water.	**Moderate (flyover only)**—see Section 3.3.1
Northern harrier *Circus cyaneus*	CDFW	–/SSC	Year-round resident; scattered throughout California; in the northwest, nests largely within coastal lowlands from Del Norte County south to Bodega Head in Sonoma County, inland to Napa County	Nests, forages, and roosts in wetlands or along rivers or lakes, but also in grasslands, meadows, or grain fields typically greater than 8 acres	**Low.** While some upland clearings of grasslands and meadows are present in the Project Area, they are not significant or large enough to support nesting or foraging for the species. The species was observed in 2015, about 2 miles from Project Area (eBird 2024). The closest occurrence in CNDDB is from 2000 about 15 miles from the Project Area (CDFW 2024b).
American goshawk *Accipter atricapillus*	CDFW	–/SSC	Nests in North Coast Ranges through Sierra Nevada, Klamath, Cascade, and Warner Mountains, in Mount Pinos and San Jacinto, San Bernardino, and White Mountains; winters along north coast, throughout foothills, and in northern deserts	Mature and old-growth stands of coniferous forest, and while found over a large range, they are more commonly found in middle and higher elevations (1,000–10,800 feet); nests in dense part of stands near an opening	**Low.** Project Area is within the elevation range of the species. Nesting and foraging habitat is not likely as there is little to no mature or older stands of coniferous forest with open understory in Project Area. The most recent observations of individuals were in 2024 about 12–13 miles from the Project Area and in 2017 about 5–6 miles from the Project Area (eBird 2024). The closest nest tree was observed in 1998, about 13 miles from the Project Area (CDFW 2024b).

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
California black rail *Laterallus jamaicenis coturniculus*	CDFW	–/ST, SFP	Northern San Francisco Bay area (primarily San Pablo and Suisun bays) and Sacramento-San Joaquin Delta	While large tidally-influenced marshes with saline to brackish water is preferred for the species, due to habitat degradation across the state, the species have been known to move into freshwater marshes when the preferred tidally-influenced habitat is not present. Vegetation associations include pickleweed (*Salicornia virginica*), bulrush (*Schoenoplectus* spp.), cattail (*Typha* spp.), or rushes (*Juncus* spp.); peripheral vegetation at and above mean high higher water necessary to protect nesting birds during extremely high tides. Nests are set on or close to the ground.	**Low.** While cattails and bulrush along ponds are present within the Project Area, the potential to support breeding habitat for the species is low. The species was documented within the Project Area in 2009 (CDFW 2024b) and has been observed in 2023 at a grid cell about 5 miles from the Project Area (the exact location of the sensitive species is not provided and only shown on a grid-cell level) (eBird 2024).
California spotted owl *Strix occidentalis occidentalis*	USFWS	FPE or FPT/SSC	From the southern Cascade Range of northern California, south along the west slope of the Sierra Nevada, and in mountains of central and southern California nearly to the Mexican border	Typically in older forested habitats; nests in complex stands dominated by conifers, especially coastal redwood, with hardwood understories; some open areas are important for foraging	**Low**. Nesting and foraging habitat is not likely as there is little to no mature or older stands of coniferous forest in Project Area. The closest activity center (best known location of a nest site) to Phase 1 is NEV0080, which includes young observed in 2016 about 2.5 miles east of the Project. The closest activity center to Phase 2 is a pair (NEV0074) observed in 2008 about 4.5 miles east of the Project (CDFW 2024b).
Great gray owl *Strix nebulosa*	CDFW	–/SE	In the Sierra Nevada from the vicinity of Quincy, Plumas County south to around Yosemite, from 3,000 to 6,000 ft	Dense, coniferous forest, usually near a meadow for foraging; nests in large, broken-topped snags	**Low**. While some habitat features such as snags and coniferous forest adjacent to meadows were present within the Project Area, they were few in number and not large in size. Additionally, the Project Area is about 500 feet below the preferred elevation range for the species. Data provided in eBird shows that this species has been observed in 2024 at a grid cell about 1.3 miles east of the Project Area, which is higher in elevation than the Project (the exact location of the sensitive species is not provided and only shown on a grid-cell level) (eBird 2024). The closest observation in CNDDB is from 2010 about 15 miles away from Project Area (CDFW 2024b).
Long-eared owl *Asio otus*	CDFW	–/SSC	Uncommon resident throughout the state, does not occupy the Central Valley and Southern California deserts	Riparian habitat; nests in dense vegetation close to open grassland, meadows, riparian, or wetland areas for foraging	**Moderate**—see Section 3.3.1

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
Bank swallow *Riparia riparia*	CDFW	–/ST	Summer resident; occurs along the Sacramento River from Tehama County to Sacramento County, along the Feather and lower American rivers; and in the plains east of the Cascade Range in Modoc, Lassen, and northern Siskiyou counties; small populations near the coast from San Francisco County to Monterey County	Nests in vertical bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam	**Low**. There is no suitable nesting habitat within the Project Area. The closest observation is from 2020 about 8 miles from Project Area (eBird 2024). The most recent CNDDB occurrence is from 2008 about 16 miles from Project Area (CDFW 2024b).

Common name Scientific name	Query Sources	Status[1] (Federal/State)	Distribution in California	Habitat Association	Likelihood to Occur within the Project Area
Yellow warbler *Setophaga petechia*	CDFW	–/SSC	Summer resident; nests in most of California, except most of the Central Valley, high Sierras, and Mojave and Colorado deserts	Deciduous riparian woodland with an open canopy and close to water, along streams or wet meadows	**High**—see Section 3.3.1
Yellow-breasted chat *Icteria virens*	CDFW	–/SSC	Uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada.	Early-successional riparian habitats with a dense shrub layer and an open canopy	**Moderate**—see Section 3.3.1
Grasshopper sparrow *Ammodramus savannarum*	CDFW	–/SSC	Summer resident; nests in Mendocino, Trinity, and Tehama counties south, west of the Cascade–Sierra Nevada axis and southeastern deserts, to San Diego County	Typically found in moderately open grasslands with scattered shrubs	**Moderate**—see Section 3.3.1
Numerous other bird species protected by the Migratory Bird Treaty Act (MBTA)	eBird	MBTA	Range encompasses California	Variable including, but not limited to, grasses, shrubs, and trees	**High**—see Section 3.3.1
Mammals					
Western red bat *Lasiurus frantzii*	CDFW	–/SSC	Near the Pacific Coast, Central Valley, and the Sierra Nevada	Roosts in foliage, primarily in riparian trees, such as sycamores and cottonwoods, while less in shrubs; woodlands near streams, fields and orchards; feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands	**Moderate**—see Section 3.3.1
Townsend's big-eared bat *Corynorhinus townsendii*	CDFW	–/SSC	Throughout California, found in all but subalpine and alpine habitats, details of distribution not well known	Roosts in cavities, most often in tunnels, caves, mines, and buildings, but also rock shelters, preferentially close to water; forages in the riparian zone and along creeks and river drainages	**Moderate**—see Section 3.3.1
Fisher, Southern Sierra Nevada DPS *Pekania pekanti*	CDFW	FE/ST, SSC	Southern Sierra Nevada mountains	Dense advanced-successional conifer forests, with complex forest structure; den in hollow trees and snags	**Low.** The habitat is not suitable to support this species. There is little to no dense advanced-successional conifer forests present within the Project Area, which is dominated by oak woodlands and chaparral. Some hollow trees and snags present. Critical habitat for this species is located about 140 miles south of the Project Area. The closest and most recent observation is from 1987 about 9 miles from the Project Area (CDFW 2024b).

[1] Status codes:

Federal

FE = Listed as endangered under the federal Endangered Species Act
FT = Listed as threatened under the federal Endangered Species Act
FPE = Federally proposed as endangered
FPT = Federally proposed as threatened
FC = Federal candidate species
FD = Federally delisted

State

SE = Listed as Endangered under the California Endangered Species Act
ST = Listed as Threatened under the California Endangered Species Act
SCE = State Candidate Endangered
SSC = CDFW Species of Special Concern
SFP = CDFW Fully Protected species

BGEPA = Federally protected under the Bald and Golden Eagle Protection Act

MBTA = Migratory Bird Treaty Act

Appendix B

List of Wildlife Species Incidentally Observed within the Project Area During the Reconnaissance-level Survey

Table B-1. Wildlife species documented[1] within the Survey Area during the reconnaissance-level survey on December 4 and 5, 2024.

Common name	Scientific name
Birds	
Canada Goose	*Branta canadensis*
California Quail	*Callipepla californica*
Wild Turkey	*Meleagris gallopavo*
Turkey Vulture	*Cathartes aura*
Acorn Woodpecker	*Melanerpes formicivorus*
Nuttall's Woodpecker	*Dryobates nuttallii*
Northern Flicker	*Colaptes auratus*
Black Phoebe	*Sayornis nigricans*
California Scrub-Jay	*Aphelocoma californica*
American Crow	*Corvus brachyrhynchos*
Common Raven	*Corvus corax*
Oak Titmouse	*Baeolophus inornatus*
Bushtit	*Psaltriparus minimus*
Wrentit	*Chamaea fasciata*
Hermit Thrush	*Catharus guttatus*
House Finch	*Haemorhous mexicanus*
Dark-eyed Junco	*Junco hyemalis*
California Towhee	*Melozone crissalis*
Spotted Towhee	*Pipilo maculatus*
Mammals	
Black-tailed jackrabbit	*Lepus californicus*
Mule deer	*Odocoileus hemionus*

[1] Species were either seen, heard, or documented by scat or tracks

Appendix C

Biological Resources Standard Project Requirements from the CalVTP Program Environmental Impact Report

Standard Project Requirements from CalVTP PEIR (Ascent Environmental 2019)

The following Biological Resources SPRs reproduced from the CalVTP PEIR (Ascent Environmental 2019) would be incorporated into the Project if the CEQA process is completed under the CalVTP. SPRs are intended to avoid and minimize environmental impacts and comply with applicable laws and regulations.

Biological Resources Standard Project Requirements

Biological resource SPRs and mitigation measures require that qualified individuals implement components of the measures. The requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including biologist, botanist, ecologist, Registered Professional Forester, biological technician, or supervised designees working at the direction of a qualified professional) as long as they are qualified for the task at hand.

Qualified Registered Professional Forester (RPF) or Biologist: To be qualified, an RPF or biologist would hold a wildlife biology, botany, ecology, forestry, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be knowledgeable about state and federal laws regarding the protection of special-status species, and 6) have experience with CDFW's California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and approve the qualifications of RPFs or biologists. If species-specific protocol surveys are performed, surveys would be conducted by qualified RPFs or biologists with the minimum qualifications required by the appropriate protocols, including having CDFW or USFWS approval to conduct such surveys, if required by certain protocols.

Qualified RPF or Botanist: To be qualified, an RPF or botanist would 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018), or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor, 4) be familiar with the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/), and 5) be familiar with federal, state, and local statutes and regulations related to plants and plant collecting. The project proponent will review the resume and approve the qualifications of RPFs or botanists.

Qualified RPF or Biological Technician: To be qualified, an RPF or biological technician would 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting biological monitoring of relevant species or resources, and 4) be knowledgeable about state and federal laws regarding the protection of special-status species. The project proponent will review the resume and approve the qualifications of RPFs or biological technicians.

SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA for each treatment project, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the Biological Resources Discussion in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:

1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided**. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:
    a. by physically avoiding the suitable habitat, or
    b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).

    Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.
2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource

agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7).

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SENSITIVE NATURAL COMMUNITIES AND OTHER SENSITIVE HABITATS

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:

- require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website).
- map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:

- Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.
- Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.
- Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see *Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service*).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.
- Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.
- The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats.

Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.

- In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR BIO-5: **Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.** The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).

During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area.

For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:

- Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of

sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.

- The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.

These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.

Additional measures will be applied to ecological restoration treatment types:

- For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.
- Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved.
- A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology.
- If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity.

These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.

A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as

required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.

SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):

- clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk;
- include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training;
- minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment;
- minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;
- clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and
- follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016**Error! Hyperlink reference not valid.**).

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPECIAL-STATUS PLANTS

SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities."

Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status.

If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.

For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:

- If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.
- If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

ENVIRONMENTALLY SENSITIVE HABITAT AREAS

SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts:

- The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA.
- Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the vegetation types present in the ESHA.
- A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs.
- Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs.

This SPR applies to all treatment activities and all treatment types, including treatment maintenance.

INVASIVE PLANTS AND WILDLIFE

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):

- clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;
- for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
- inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;
- stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
- identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;
- treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and
- implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version).

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

WILDLIFE

SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist

to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.

The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design will meet the following standards:

- Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale or snag a leaping animal; and, if feasible, keeping electric netting-type fencing electrified at all times or laid down while not in use.
- Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted.
- Allow wildlife to jump over easily without injury by installing fencing that can flex as animals pass over it and installing the top wire low enough (no more than approximately 40 inches high on flat ground) to allow adult ungulates to jump over it. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass.
- Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers.

This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.

SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist.

If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the

area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).

If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following measures:

- **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.
- **Modify Treatment.** The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.
- **Defer Treatment.** The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.

Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance

strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests:

- **Monitor Active Raptor Nest During Treatment**. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases.
- **Retention of Raptor Nest Trees**. Trees with visible raptor nests, whether occupied or not, will be retained.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

Geology, Soils, and Mineral Resource Standard Project Requirements

SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

Hydrology and Water Quality Standard Project Requirements

SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based onin 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version) on either side of watercourses. WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths

Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key	1) Domestic supplies, including springs, on site and/or within 100	1) Fish always or seasonally present	No aquatic life present, watercourse showing evidence of being	Man-made watercourses, usually

Water Class	Class I	Class II	Class III	Class IV
Indicator Beneficial Use	feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.
WLPZ Width (ft) – Distance from top of bank to the edge of the protection zone				
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.	
30-50 % Slope	100	75		
>50 % Slope	150	100		

Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version)

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced, a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).
- Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.
- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.
- WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.
- Burn piles will be located outside of WLPZs.
- No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.
- Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be

selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.

- Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.
- Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.
- Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

Minimization Measures from CalVTP PEIR (Ascent Environmental 2019)

Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants

If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment.

The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead:

- creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species);
- purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and
- if the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future.

If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:

- the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when:
- habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and
- reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.

If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.

If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.

If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.

If the loss of occupied habitat cannot be offset (e.g., if preservation of existing populations or creation of new populations through relocation efforts are not available for a certain species), and as a result treatment activities would substantially reduce the number or restrict the range of listed plant species, then the treatment will not qualify as within the scope of this PEIR.

Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.

Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands

The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:

- Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.
- Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.
- To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).
- To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).
- Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/).
- Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be

determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory.

The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.