

## EC-1: INTRODUCTION

### 1.1 PROJECT OVERVIEW

The California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR) evaluates the potential environmental effects of implementing qualifying vegetation treatments to reduce the risk of wildfire throughout the State Responsibility Area (SRA) in California. It was designed for use by state, special district, and local agencies to accelerate vegetation treatment project approvals determined to be within the scope of the PEIR.

Deadly wildfires ravaging California are prompting timberland owners to seek guidance on mitigating risks (CA BoF 2018). Fire weather is becoming more extreme (Stephens et al. 2014). Higher fire severity may also be due to climate change effects including declining coastal fog and multiyear droughts (Thorne et al. 2017, 2018) that slow the decomposition of hazardous surface fuels that drive fire behavior (Davies et al. 2016).

At present, little guidance is available for the redwood region where severe wildfire has been uncommon until recently (Goss et al. 2020). Better timberland management tools must be honed to create forest conditions where future fires are less destructive (FMTF 2021). Management approaches that need to be tested and compared in redwood forests include application of fuels treatments such as lop and scatter, mastication (Jain et al. 2014), and prescribed burning (York et al. 2020).

Some coastal forests that regenerated after harvesting long ago are becoming progressively denser and need management to promote forest health, reduce hazardous fuel loads, and to space trees further apart before the next wildfire (FRAP 2017, Forest Climate Action Team 2018). Other coastal forests are actively managed for timber and other objectives, but without scientific knowledge of how prescription choices could alter fire severity. Research is needed to answer the question: "In redwood forests, how does fire behave under different fuel treatments?". Such information would guide redwood region landowners and managers seeking to mitigate the risk of high-severity wildfire by implementing fuel treatments that are suitable for their particular objectives (Forest Climate Action Team 2018).

Field experiments must be established to test and compare alternate fuel treatments side-by-side, but until future wildfires burn through these experiments and show real fire effects (North and Hurteau 2011, Lydersen et al. 2017), the best available approach is to simulate first-order fire effects in different stand structures under different fire weather scenarios (Reinhardt et al. 2001, Stephens et al. 2012).

The project proponent has developed the proposed vegetation treatments on 470 acres as part of a research project aimed at reducing the fuel loading using five different approaches on stands approximately 7-10 years post timber harvest to encourage a more fire resilient ecosystem. The project proponent and collaborators will test manual and mechanical fuel treatments and prescribed burning. This will give insight into the first order fire effects on a treated forest. Data will be collected before and after each treatment and fire behavior modelling will be conducted. The results will help answer the question that forest managers seek – how well do these treatments work to reduce fuels and mitigate wildfire severity and intensity?

In addition to the fuel treatment study, a wildlife study will take place concurrently to provide insight into how fuel treatments affect birds, bats, and other wildlife in the short and long term.

Acoustic monitors for both bat and bird species are placed within fuels reduction treatment units to record long-term, year-round data of pre-treatment and post-treatment species composition and occupancy. Wildlife cameras are installed along with the acoustic monitors to capture species presence. The objectives of this study are to:

1. Provide baseline species composition and occupancy data prior to each fuel reduction treatment.
2. Evaluate potential species occupancy and community composition changes following each treatment.
3. Evaluate the longevity of potential changes in species occupancy and community composition (short term vs. long term effects) post treatment.

The entirety of the project is on Jackson Demonstration State Forest (JDSF). The primary purpose of JDSF is to conduct innovative demonstrations, experiments, and education in forest management (CA BoF 2016). Significant gaps remain in our knowledge of forest ecosystem functions as well as the interactions between management activities and ecosystem functions (California Department of Forestry and Fire Protection, 2016). Research and demonstration projects shall be directed to the needs of the general public, small forest landowners, timber operators, and the timber industry. The project's proposed vegetation treatments are part of a research study centered on the effectiveness of different fuels treatments on reducing wildfire fuels and greenhouse gases within the redwood region and how those treatments can be implemented by landowners. The research component of this project is funded through CAL FIRE's Forest Health Research Grants.

### 1.1.1 Proposed Project

The proposed project will implement a variety of vegetation treatments on 470 acres within JDSF. The project is in Mendocino County, along HWY 20, between Willits and Fort Bragg, CA. JDSF is part of CAL FIRE's State Forest Program in which there are eight demonstration state forests totaling 71,000 acres. The forests represent the most common forest types in the state. The Board of Forestry and Fire Protection policy provides that JDSF management must include "research and demonstration projects [that] include silviculture, mensuration, logging methods, economics, hydrology, protection, and recreation," (California Department of Forestry and Fire Protection, 2016).

### 1.1.2 Treatment Area Descriptions

#### 1.1.2.1 Fairbanks Drive

This treatment area is located within the Caspar Creek Planning Watershed. It is approximately 6.5 miles southeast of the community of Fort Bragg. Logging within the area began as early as the 1860's when old growth was clearcut. Naturally regenerated second growth was harvested in the late 1950s/early 1960s. Additional harvests occurred in 1987 as a group selection and 2015 as a selection harvest. Dominant conifer species are coastal redwood and Douglas-fir along with relatively minor components of western hemlock, grand fir, and Bishop Pine. Tanoak, madrone, and giant chinquapin are the predominant hardwood species. Understory vegetation consists of huckleberry, sword fern and small tanoak and conifers. Slopes are predominantly north-facing.



Figure 2. Coastal redwood coppice sprouts



Figure 3. Heavy brush and understory component

### 1.1.2.2 Top of Hare

This treatment area is predominantly located within the Hare Creek Planning Watershed. It is approximately 7 miles south of the community of Fort Bragg. This area was first harvested around 1860, then selection harvested in the 1980s. It was last harvested in 2016 using selection silviculture. Dominant conifer species are coastal redwood, Douglas-fir with minor components of grand fir, western hemlock, and Bishop pine. The dominant hardwood trees are tanoak, madrone, and giant chinquapin. Understory vegetation is quite varied but consists of depauperate understory to small tanoak, evergreen and red huckleberry, and sword fern.



Figure 4. Depauperate understory, ground fuels and heavy stocking levels



Figure 5. Heavy understory stocking levels

### 1.1.2.3 Cribwall

This treatment area is predominantly located within the Brandon Gulch Planning Watershed. It is approximately 6.5 miles southeast of the community of Fort Bragg. Dominant conifer species are coastal redwood and Douglas-fir and the primary hardwood trees are tanoak, madrone and bay laurel. Understory vegetation is quite varied but consists of depauperate understory to small tanoak, evergreen huckleberry, and sword fern. Historical harvesting began around 1910 when the area was clearcut and burned. Later harvests were done in 1993/1994 and most recently in 2015, both as selection harvests.



Figure 6. Residual stand comprised of redwood



Figure 7. Heavy stocking levels with an understory of sword fern

#### 1.1.2.4 Camp 8

This treatment area is located within the Brandon Gulch Planning Watershed. It is approximately 9 miles southeast of the community of Fort Bragg. Logging within the area began in the 1920's where the area was clearcut and burned. It was subsequently logged in 1997-2000 and most recently as a selection harvest in 2018. Dominant conifer species are coastal redwood and Douglas-fir along with relatively minor components of western hemlock, grand fir and California nutmeg. Tanoak, madrone, and giant chinquapin are the predominant hardwood species. Understory vegetation consists of huckleberry, sword fern and small tanoak and conifers. Slopes are predominantly south-facing.



Figure 8. Residual stand with high stocking levels intermixed with evergreen huckleberry



Figure 9. Typical understory community of tanoak brush and conifer saplings

### 1.1.2.5 **Bob Woods West**

This treatment area is predominantly located within the Brandon Gulch Planning Watershed. It is approximately 9 miles east of the community of Fort Bragg. Harvesting in the area began in the 1920s with later selection silviculture conducted in the late 1990s. Most recently the treatment area was harvested in 2016 as a selection harvest. Dominant conifer species are coastal redwood and Douglas-fir with minor components of grand fir and the occasional California nutmeg. The dominant hardwood trees are tanoak, madrone and giant chinquapin. Understory vegetation is quite varied but consists of depauperate understory to small tanoak, evergreen huckleberry, and sword fern. Slopes are predominantly northeast facing.



Figure 10. Heavy understory stocking levels



Figure 11. Residual timber stand

### 1.1.2.6 Dunlap South

This treatment area is predominantly located within the Little North Fork Big River and Two Log Creek Planning Watersheds. It is located about midway between Willits and Fort Bragg, about 14 miles east of the community of Fort Bragg. Dominant conifer species are coastal redwood, Douglas-fir with a very minor component of western hemlock and California nutmeg. The dominant hardwood species within the area is tanoak with small numbers of chinquapin and madrone. Understory vegetation is quite varied but consists of small tanoak, evergreen huckleberry, and bigleaf rhododendron. Logging of old growth occurred in the 1930's. The southern portion was harvested in the 1950's using selection silviculture. The naturally regenerated second growth and the remainder of the old growth was again harvested in 1978 using a 22" diameter-limit cut. The most recent timber harvesting occurred in 2011 and was a selection harvest.



Figure 12. Forest understory comprised of downed woody material and some slash.



Figure 13. Tanoak and redwood overstory with understory of huckleberry and tanoak

### 1.1.3 Lead Agency

For the purposes of the CalVTP PEIR and this PSA, a project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. This document is being prepared for JDSF to comply with CEQA for the implementation of vegetation treatments that require a discretionary action by a state or local agency. The CEQA lead agency is CAL FIRE.

### 1.1.3 Purpose of this Document

This document serves as the PSA/addendum to determine if the project as proposed is within the scope of the CalVTP PEIR. A portion of the project is outside of the treatable landscape, which represents the geographic extent of the PEIR, for which the impacts were examined.

Approximately 307 acres of the project are located outside the CalVTP treatable landscape while 166 acres are within the treatable landscape according to the CalVTP Treatable Landscapes ArcGIS mapper (acreages are slightly inaccurate due to mapping resolution). An Addendum to an EIR can be included when a previously certified EIR has been prepared and some changes or revisions to the project are proposed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts, consistent with CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168.

This document serves as both a PSA and an Addendum to the CalVTP PEIR to provide CEQA compliance for the proposed vegetation treatments within and outside of the treatable landscape. The checklist evaluates each resource in terms of whether the later treatment project, including the additional geographic area, would result in significant impacts that would be substantially more severe than those covered in the CalVTP PEIR and/or would result in any new impacts that were not covered in the PEIR.



# THE CALIFORNIA VEGETATION TREATMENT PROGRAM ENVIRONMENTAL CHECKLIST



## PROJECT INFORMATION

1. **Project Title:** *Greenhouse Gas Fire Fuels Mitigation Project*

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2. **CAL FIRE Project Number**

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3. **CaIVTP I.D. Number** *2022-35*

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4. **Project Proponent Name and Address:** *Jackson Demonstration State Forest*

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5. **Contact Person Information and Phone Number:** *Fey Egan, (707) 964-5674*

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6. **Project Location:** *Adjacent to Hwy 20 and Hwy 1, Mendocino County  
Sections 7 & 18, T17N, R15W, MDBM  
Sections 1,8-9 & 16, T17N, R17W, MDBM  
Sections 16, 19, 21, 22, 27, & 30 T18N, R16W, MDBM  
Section 36, T18N, R17W, MDBM  
USGS 7.5' Quadrangle Maps: Mendocino, Noyo Hill, Mathison Peak,  
Northspur & Comptche*  
[include county and coordinates; also include cross street, other major landmarks or legal description useful to identify treatment location]

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7. **Total Area to be Treated (acres)** *470*

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8. **Description of Project:** (Describe the whole action involved, including any phasing of initial treatments as well as planned treatments, including equipment to be used and planned duration of treatments, but not limited to later phases (e.g., maintenance) of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

### **a. Initial Treatment**

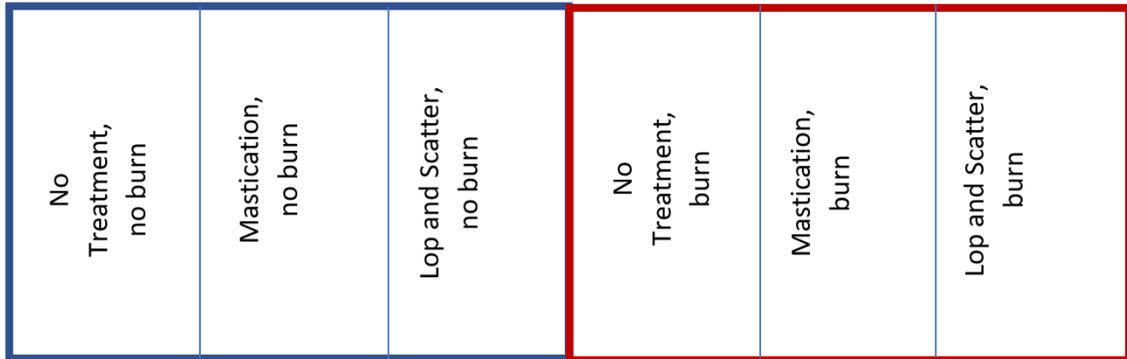
The Greenhouse Gas Fire Fuels Mitigation Project (Project) proposes to study the effect of prescribed fire versus no prescribed fire on different forest fuel treatments. By monitoring the effects of these treatments on both fuel loading and residual forest stand health, the project goal is to educate land managers and others interested in reducing wildfire risk how different fuels reduction treatments are affected by fire or a lack of fire. Objectives for the vegetation treatments are to:

- ❖ Reduce the potential for release of greenhouse gas emissions due to wildfire by directly reducing fuel loading or manipulating the fuel arrangement. This would include different fuel treatments on up to 470 acres of forestland. Additionally, by showcasing the different approaches and techniques for forest fuel treatments to land managers and others interested in reducing the threat of wildfire, this potential reduction in greenhouse gas emissions can be replicated on landscapes outside of the direct Project area.

- ❖ Maintain native conifer regeneration for sustainable timber production, create a more healthy, resilient forest stand and provide a demonstration of Ecological Restoration treatments for the public, landowners, and resource professionals.
- ❖ Remove invasive weeds and re-introduce fire to the landscape within the proposed Ecological Restoration treatment blocks.

**Experimental Design of the Research Project**

The main research project – Mitigating wildfire hazard in the redwoods; effectiveness and tradeoff of fuel treatments – is a long-term project that will attempt to inform landowners, managers, and practitioners seeking to mitigate the risk of high-severity wildfire by implementing different treatments, then monitoring the effect on fuel loading post-treatment and the residual stand effects. The experimental design for this project is a “Split-plot Randomized Complete Block Design” with 6 replicates on JDSF. Within each site, there are two boxes. The boxes have the treatment prescribed burn and no prescribed burn. Within each box, there are three blocks for three different pre-treatments – mastication, lop and scatter and no pre-treatment. Each block is approximately 10 acres. The experimental design is illustrated in the figure below. The advantage of this design allows comparison between pre-treatments as well as between burn vs not burned treatments.



The CalVTP treatments will occur within six treatment sites totaling 470 acres. The six treatment sites were all timber harvested in approximately the last 7 to 10 years using single tree selection silviculture. The goals of the treatments will be to reduce fuel loading while maintaining native species regeneration to support a sustainable timber producing forest as well as maintaining wildlife habitat, recreation opportunities and other research potential.

The proposed VTP treatment type is Ecological Restoration. Ecological Restoration treatments would begin to return the landscape to pre-European (Classical) conditions that were achieved by natural fire processes and Indigenous burnings. The return of fire would improve habitat quality, increase late seral stand characteristics (snags, basal hollows or goose pens, reduction of stems per acre), and remove excess fire fuel buildup from fire exclusion practices, which will lead to a more carbon stable, and disturbance resilient stand structure and composition. Treatment activities would include various combinations of mechanical treatments using masticators to break down trees and shrubs on areas accessible by heavy equipment, chainsaws to lop and scatter material, and prescribed burning.

Implementation of initial treatments would require a minimum of 6 JDSF staff, 2-4 hand crews and 2-4 engine crews (Type 3 and Type 6), along with their associated vehicles to travel to and from the treatment areas. Staff numbers, engines and hand crew personnel may increase in size according to project needs and complexity of treatment activities. Treatments would be scheduled to begin in Spring of 2023 depending on weather conditions and other restrictions would be completed in the Spring of 2025.

Through existing and future partnerships with local organizations, agencies and researchers, the greenhouse gas fire fuels mitigation project would fit well in JDSF’s research and demonstration mandate. The locations of the projects provide easy access for private landowners, students, resource professionals and other stakeholders. The proposed treatments are described in more detail below.

**Lop and Scatter Treatment**

Lop and scatter treatments will consist of reducing living and dead woody material into smaller pieces that can be scattered onto the forest floor. By reducing the size of woody material and scattering it so that no portion exceeds 18" above ground, material should decompose at a faster rate. This is considered 'manual' treatment. Manual treatment is proposed for 145 acres. 83 of those acres will have a manual treatment then a prescribed burn following the manual treatment. Manual treatment will take place between the summer of 2023 and the spring of 2024. Lopped material will be allowed to cure over the summer of 2024 and then a prescribed burn will follow. The remaining 62 acres will only receive manual treatment alone.

**Mastication**

Mastication involves reducing woody biomass into large chunks which are scattered onto the forest floor. This method of treatment is generally done with a masticator head generally mounted onto an excavator. This is considered 'mechanical' treatment. Mechanical treatment is proposed for 133 acres. 71 acres will be masticated and then broadcast burned, while the remaining 62 acres will be masticated with no prescribed burn following mastication. Mechanical treatment will take place between the summer of 2023 and the spring of 2024. Masticated material will be allowed to cure over the summer of 2024 and then a prescribed burn will follow.

**Prescribed Burn Treatment**

Prescribed burn treatments will be implemented on 282 acres proposed for treatment, with 155 of those acres pre-treated with either mastication or lop and scatter prior to burning; the remaining 127 acres will be burned without pre-treatment. The proposed project will utilize CAL FIRE Mendocino Unit (MEU) and JDSF staff to implement the burns in the Fall of 2024. Equipment and personnel needed for each treatment location (6) will include between 2-5 engines (Types 3 and 6), 2-4 crews and associated vehicles, and 8-14 pick-up trucks. ATVs or side-by-sides may be utilized. Any control lines needed will be constructed by MEU's fire crews and engine crews or by heavy equipment. The handlines will connect existing roads, skid-trails, and other features to make logical burning units. Handline construction will commence once the CalVTP is approved and will continue through until the burning of the units in Fall of 2024.

**Herbicide Treatment**

The project proponent may use hand application of herbicide treatments if invasive species encroach on treatment areas after manual, mechanical, or prescribed burning treatments occur. Herbicide application is not proposed as a primary treatment method, but instead as a secondary treatment that may be applied in order to maintain the fuel hazard or native plant restoration benefits of the initial mechanical, manual, or prescribed fire treatment. Herbicide use may be needed for the purpose of promoting native plant species success over invasives. Application methods may include backpack sprayers, cut surface, or other hand directed spray methods. Aerial or vehicular spray methods are not proposed under this project. Spot treatment will likely utilize Glyphosate or Triclopyr, although Imazapyr, Clopyralid, and Sulfometuron Methyl may be used.

**No Treatment**

This CalVTP project is part of a research project centered on the effectiveness of different treatments to reduce wildfire fuels and greenhouse gases within the redwood region and how those treatments can be implemented by landowners. The research will include control areas totaling 64 acres out of the 470 total acres within the project. These areas will not be treated by manual, mechanical, or prescribed fire treatments nor will they receive any other treatment.

**Treatment Maintenance**

Maintenance treatments of project areas will be incorporated in JDSF's existing general land management maintenance schedule and will be based on real-time monitoring of site conditions. Maintenance treatments could occur as frequently as a 5-to-10-year basis but may be shorter or longer

depending on site conditions. The need for retreatment with herbicides for control of invasive plant species will be evident in the 1-2 year period following the initial treatment. If herbicide treatment is prescribed, it will likely occur within 2 years of the initial treatment and then on a recurring annual basis for 1-2 years until invasive plant species drop below a fuels management or native species conservation threshold. The project areas are generally managed on a 15–20-year reentry cycle, so some additional management of the timber stand is likely to occur approximately 5-10 years after this project is complete. Retreatment methods will involve the same vegetation treatment activities used in the original treatment (manual, mechanical, prescribed fire, and herbicides); however, JDSF anticipates that manual, mechanical, and herbicide treatments will decline over time and prescribed fire will be utilized more. However, if the retreatment occurs during a timber harvest plan, it might be more efficient and effective to utilize manual and mechanical treatments as they will already be onsite for other work.

9. **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

10. **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 Project]

- Prescribed (Broadcast) Burning, 282 acres
- Prescribed (Pile) Burning, \_\_\_\_\_ acres
- Mechanical Treatment, 133 acres
- Manual Treatment, 145 acres
- Prescribed Herbivory, \_\_\_\_\_ acres
- Herbicide Application, 20 acres

11. **Fuel Type** [see description in in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in Description of Project]

- Grass Fuel Type
- Shrub Fuel Type
- Tree Fuel Type

12. **Geographic Scope** [Refer to Treatable Landscape Map for a map of the CalVTP treatable landscape, check one box]

- The treatment site is entirely within the CalVTP treatable landscape
- The treatment site is NOT entirely within the CalVTP treatable landscape

The CalVTP Treatable Landscape boundary was digitally developed at a large scale, which did not allow for high resolution mapping. As a result, areas were dis-included from the treatable landscape, even though the vegetation is very similar to the surrounding vegetation within the treatable landscapes. These areas need treatment, as they provide fuel ignition and transfer fire to the “treatable landscapes.” Onsite field evaluation consistent with the CalVTP EIR determined that the vegetation in the project is consistent with the California Vegetation Cover Types (Wildlife Habitat Relationship - 13) Conifer

Woodland designation and does not differ from adjacent treatable vegetation types within and surrounding the project area. Additionally, the entire project area is within the SRA and the vegetation is not a wet meadow, estuary, or other non-fire prone area excluded from the treatable landscape. Therefore, the environmental analysis in the PEIR is applicable to the entire project area due to the similarities of the areas within and outside of the treatable landscape.

**13. Surrounding Land Uses and Setting:** (Briefly describe the project's surroundings)

*The project area is situated within rural areas of coastal Mendocino County. The project is located entirely on state-owned land. Surrounding land uses include recreation areas, campgrounds, State Parks, and timber land.*

**14. Other public agencies whose approval is required:** (e.g., permits)

*Smoke management plan will be prepared for **Mendocino County Air Quality Management District***

*Burn permits will be obtained from **California Department of Forestry and Fire Protection and Mendocino County Air Quality Management District***

**15. 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 CalVTP SPR CUL-2, an updated Native American contact list and sacred lands file search was obtained from the Native American Heritage Commission (NAHC). The sacred lands data file indicated no sacred sites occur within the Project area or adjacent lands. On November 7, 2022, letters were sent to each of the 15 Tribal contacts provided by the NAHC for Northern Mendocino County (listed below). As project planning and implementation proceeds, JDSF will continue to consult with interested Tribal representatives regarding the project and incorporate their concerns into project planning and protection measures as warranted.

- Native American Heritage Commission
- Coyote Valley Band of Pomo Indians - Michael Hunter, Chairman, Priscilla Hunter, Tribal Historic Preservation Officer and Environmental Protection Department Director
- Guidiville Indian Rancheria - Donald Duncan, Chairperson
- Deborah Hutt
- InterTribal Sinkyone Wilderness Council - Hawk Rosales, Executive Director
- Cahto Tribe of the Laytonville Rancheria - Mary J. Norris, Chairwoman
- Manchester Band of Pomo Indians - Jaime Cobarrubia, Chairman & Sal Martinez, Tribal Secretary
- Noyo River Indian Community
- Pinoleville Pomo Nation - Leona Williams, Chairperson
- Potter Valley Tribe - Salvador Rosales, Chairperson
- Redwood Valley Little River Band of Pomo Indians - Debra Ramirez, Chairperson

- Round Valley Reservation/Covelo Indian Community – James Russ, President & Patricia Rabano, Tribal Historic Preservation Officer
- Shebelna Band of Mendocino Coast Pomo Indians - Charlie Fales, Councilmen
- Sherwood Valley Band of Pomo Indians – Melanie Rafanan, Chairman & Valerie Stanley, Tribal Historic Preservation Officer
- Wailaki Tribe - Louis Hoaglin Jr., Chairperson
- Yokayo Tribe – Chairperson

**16. Use of 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 retreating any area within the project boundary, the project proponent will verify that site conditions described in the PSA are still relevant.

**17. 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.]*

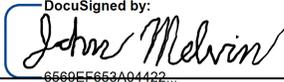
- All applicable SPRs and Mitigation Measures are feasible and will be implemented
- There is NO new information which would render mitigation measures previously considered infeasible or not considered in the CalVTP PEIR now feasible OR such mitigation measures have been adopted. [Guidelines Sec.15162(a)(3); PRC Sec. 21166(c)]
- All applicable SPRs and Mitigation Measures are NOT feasible or will NOT be implemented *(provide explanation)*

Explanation:

### DETERMINATION (To be completed by the project proponent)

**On the basis of this initial evaluation:**

- I find that all of the effects of the proposed project (a) have been analyzed adequately in the CalVTP PEIR, (b) have been avoided or mitigated pursuant to the CalVTP PEIR, and (c) all applicable mitigation measures and Standard Project Requirements 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 examined 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 examined in the CalVTP PEIR. Although these effects might be significant in the absence of additional mitigation beyond what is already required pursuant to the CalVTP PEIR, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent 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 environmental effects that were not examined in the CalVTP PEIR. Because these effects are or may be significant and cannot be clearly mitigated, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Signature:  Date: 9/1/2023  
 Printed Name: John Melvin Title: Assistant Deputy Director

CALIFORNIA DEPARTMENT OF  
 FORESTRY AND FIRE PROTECTION  
 CAL FIRE

Agency

## 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 be different through the life span 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 Chapter 3 – “Environmental Settings, Impacts, and Mitigation Measures, 3.1.4 – Terminology Used In the PEIR”)
  - **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 that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
  - **Less Than Significant with Mitigation (LTSM)** - An impact was identified within the PEIR which 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.
  - **Potential 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.
  - **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
  - **Significantly 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.
  - **Not applicable (N/A)**

If the impact is equal to or less than the impact identified 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, 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. When preparing 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. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.

6. Standard Project Requirements (SPR) and Mitigations Measures (MM).

- **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.
- **Implementing Entity.** Most cases this will be CAL FIRE. 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., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
- **Verifying/Monitoring Entity.** Most cases this will be CAL FIRE. 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.
- **NOTE:** the cited SPRs and MMs are summarized to manage the templet's size. Refer to the approved CalVTP language attached for the full list of requirements.

## EC-1: AESTHETICS AND VISUAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>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</b></p>	Impact AES-1, 3.2	LTS	<p><u>SPR AES- 2</u>  <u>SPR AQ- 2, 3</u>  <u>SPR REC-1</u></p>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Initial and maintenance treatments would include mechanical treatments, manual treatments, herbicide spot treatments, and prescribed 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. The proposed treatments would occur on State owned land, where public recreation trails and County Roads provide public viewpoints. There are no eligible or designated State scenic highways with direct views of the project area (Caltrans 2019). However, smoke from prescribed burning could be visible from public viewpoints along Highways 1 or Highway 20 which are both eligible for scenic highway status, Road 409 (Caspar-Little Lake Road), Road 408 (Little Lake Road) as well as from public viewing areas of State Forest campgrounds near Camp One Recreation Area, Camp 8, Bob Woods Trail, and Camp 20 Recreation Area. Short-term substantial degradation of the visual character of the project area will be less than significant. Smoke from prescribed burns would not result in substantial short-term aesthetic impacts, because burning would be temporary, and the requirement to prepare and adhere to a smoke management plan (SMP) (SPR AQ-2) and a Burn Plan (SPR AQ-3) which prescribe the conditions under which prescribed burning can occur to reduce the generation and visibility of smoke. Therefore, this impact would be less than significant. SPRs applicable to the proposed treatments are AES-2, AQ-2, AQ-3, and REC-1. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what is covered in the PEIR.</p>						
<p><b>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</b></p>	Impact AES-2, 3.2	LTS	<p><u>SPR AES- 1</u>  <u>SPR AES- 3</u>  <u>SPR AD- 4</u>  <u>SPR REC- 1</u></p>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Initial and maintenance treatments would include mechanical treatments, manual treatments, herbicide spot treatments, and prescribed burning to implement the ecological restoration treatment type. The proposed treatments would occur on State owned land, where public recreation trails and County Roads provide public viewpoints. There are no eligible or designated State scenic highways with direct views of the project area (Caltrans 2019). No forest land will be converted to other use and the aesthetic value will not be degraded. This project will likely result in a more open understory with less deadwood, which is typically considered more aesthetically pleasant than understories with limited visibility (Golivets, 2011). Because ecological restoration would be designed to improve habitat quality and create a landscape appearance closer to native conditions, it would result in long-term beneficial visual impacts SPRs applicable to the proposed treatments are AES-1, AD-4, and REC-1. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what is covered in the PEIR.</p>						

<b>Impact AES-3:</b> 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	Impact AES-3, 3.2	SU	<u>MM AES- 3</u>	No	N/A	<input checked="" type="checkbox"/>
This impact does not apply to the proposed project because no fuel breaks are proposed and no State Scenic Highways exist within the project area.						
<b>Other Impacts to Aesthetics:</b> Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR AES-1 Vegetation Thinning and Edge Feathering:</b> This SPR only applies to mechanical and manual treatment activities within all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
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 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 fade into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.			
<b>SPR AES-2 Avoid Staging within Viewsheds:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
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.			
<b>SPR AES-3 Provide Vegetation Screening:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>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.</i>			

<b>MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks</b>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>This impact does not apply to the proposed project because no fuel breaks are proposed.</i>			

## EC-2: AGRICULTURE AND FOREST RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AG-1: Result Directly 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</b>	Impact AG-1, 3.3	LTS	N/A	No	N/A	<input checked="" type="checkbox"/>
<p>This impact does not apply to the proposed project because the property is designated for research, demonstration, and recreation. No loss of forest land or conversion of forest land to non-forest use will result from this project. Overstory trees 12" in DBH or greater will not be cut. Prescribed burning is projected to result in few losses to the overstory canopy based on past prescribed burning in similar stands on the property. If higher mortality results in significant loss of canopy, then stocking levels will be assessed, and if necessary, planting will occur within 5 years of the mortality event to ensure adequate stocking. Additionally, because the area is generally considered low in snag density, some overstory mortality would be welcomed as it would recruit additional wildlife habitat for primary cavity excavators and secondary cavity users.</p>						
<b>Other Impacts to Agriculture and Forest Resources: Would the project result in other impacts to agriculture and forest resources that are not evaluated in the CalVTP PEIR?</b>				No	N/A	<input checked="" type="checkbox"/>

## EC-3: AIR QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact

<b>Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS</b>	Impact AQ-1, 3.4	PSU	<u>SPR AD- 4</u> <u>SPR AQ- 2, 6</u> <u>MM AQ- 1</u>	Yes	PSU	<input checked="" type="checkbox"/>
<p>The proposed project involves using various types of equipment, vehicles, handheld power tools, and using prescribed fire to conduct broadcast burns within the treatment areas. Masticators, loaders, dump trucks, chippers, pickups, trucks, crew carriers, chainsaws, and other associated vegetation management equipment, vehicles, and tools are types of petroleum-powered resources for on-road and off-road use to implement both mechanical, manual, and herbicide vegetation treatments. Fire engines and fire crew carriers, which also use petroleum-powered resources, would be used to support the prescribed broadcast burning. The usages of the equipment, vehicles, tools, and prescribed burning for on-road and off-road purposes would result in emissions of criteria pollutants that could exceed California ambient air quality standards (CAAQS), the national ambient air quality standards (NAAQS), or MCAQMD rules and regulations.</p> <p>As described in the PEIR, due to multiple variables quantifying the reduction of emissions, the impact would remain potentially significant and unavoidable. The determination is consistent with the PEIR and would not constitute a substantially more severe impact than identified in the PEIR. SPRs applicable to the proposed treatments are AD-4, AQ-2, and AQ-6. Mitigation Measure AQ-1 would reduce the mass emissions of criteria air pollutants and precursors generated by use of on-road vehicles and off-road equipment during treatment activities.</p>						
<b>Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk</b>	Impact AQ-2, 3.4	LTS	<u>SPR HAZ- 1</u> <u>SPR NOI- 4</u> <u>SPR NOI- 5</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Use of vehicles and mechanical equipment during initial and maintenance treatments could expose people to diesel particulate matter emissions. The potential to expose people to diesel particulate matter emissions was examined in the PEIR. Diesel particulate matter emissions from the proposed treatments are within the scope of the PEIR because the exposure potential is the same as analyzed in the PEIR, and the types and amount of equipment that would be used as well as the duration of use during proposed treatments are consistent with those analyzed in the PEIR. Diesel particulate matter generated by treatment activities would not take place near any single sensitive receptor for an extended period. In addition, diesel particulate matter dissipates rapidly from the source, and exposure concentrations would decline with distance from these activities (Zhu et al. 2002). Furthermore, SPR HAZ-1 requires that all diesel and gasoline-powered equipment be properly maintained to comply with all state and federal emissions requirements, which would prevent excessive emissions of diesel particulate matter due to poorly functioning equipment. Also, 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 exhaust emissions would be temporary, would not be generated at any one location for an extended period, and would dissipate rapidly from the source with an increase in distance.</p>						
<b>Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk</b>	Impact AQ-3, 3.4	LTS	<u>SPR AQ- 4, 5</u>	No	N/A	<input checked="" type="checkbox"/>
No naturally occurring asbestos is found in the project or surrounding area.						
<b>Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk</b>	Impact AQ-4, 3.4	PSU	<u>SPR AD- 4</u> <u>SPR AQ- 2, 6</u>	Yes	PSU	<input checked="" type="checkbox"/>
<p>The potential to expose people to toxic air contaminants was examined in the PEIR. The project proponent would apply AD-4, which directs for public notifications before prescribed burning. AQ-2 requires submitting a smoke management plan to Mendocino County Air Quality Management District. An approved smoke management plan limits prescribed burning to permissible burn days. AQ-6 requires a prescribed burn project planned and managed by non-CAL FIRE crews must follow all safety procedures required by CAL FIRE.</p>						

<b>Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust</b>	Impact AQ-5, 3.4	LTS	<u>SPR HAZ- 1</u> <u>SPR NOI- 4, 5</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>The use of vehicles and mechanical equipment during initial and maintenance treatments may expose human receptors to the objectional odors from diesel exhaust. This project will comply with the following applicable SPRs to minimize the potential for impacts on diesel exhaust exposure: HAZ-1 and NOI-5. The implementation of these SPRs will reduce the amount of exhaust emissions produced by equipment by restricting idle time. Based on the staging area location requirements and potential road closures, operation limitations, and equipment maintenance, impacts of this project will remain less than significant. The potential to expose human receptors to diesel exhaust was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, 37-38). The release of objectional odors from diesel exhaust during proposed treatments is within the scope of the impacts stated in the PEIR because the treatment activities are consistent with those analyzed in the PEIR. The CalVTP would not introduce any new operational sources of odors to the treatable landscape or any new locations where people spend time that could be exposed to existing odor sources. Diesel-powered equipment used for treatments implemented under the CalVTP could result in short-term odorous diesel exhaust emissions.</p>						
<b>Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning</b>	Impact AQ-6, 3.4	PSU	<u>SPR AD- 4</u> <u>SPR AQ- 2, 6</u>	Yes	PSU	<input checked="" type="checkbox"/>
<p>The project proponents would apply SPRs AD-4, AQ-2, AQ-3, and AQ-6. Prescribed burn treatments could expose people to objectionable odors. Prescribed burning would be conducted in accordance with local air district regulations and the Smoke Management Plan. Treatments are generally located in less populated areas. Additionally, exposure to smoke would be short duration and occur infrequently. The duration and parameters of the prescribed burn treatments are within the scope of the activities addressed in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, 37-38); therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. All feasible measures to prevent and minimize smoke odors as well as exposure to smoke odors are included in SPRs.</p>						
<b>Other Impacts to Air Quality:</b> Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?			none	No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR AQ-1 Comply with Air Quality Regulations:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<b>SPR AQ-2 Submit Smoke Management Plan:</b> This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<i>Prior to initiation of burning operations, the project proponent will submit a SMP to the Mendocino County Air Quality Management District.</i>			

<b>SPR AQ-3 Create Burn Plan:</b> The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<i>There is no naturally occurring asbestos within the project area.</i>			
<b>SPR AQ-4 Minimize Dust:</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
This project will be implemented to reduce dust production to the maximum extent feasible utilizing measures described in this SPR such as limiting vehicle speed on unpaved areas and suspending ground disturbing activities when there is a visible dust transport outside the project area.			
<b>SPR AQ-5 Avoid Naturally Occurring Asbestos:</b> This SPR applies to all treatment activities and treatment types.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>There is no naturally occurring asbestos within the project area.</i>			
<b>SPR AQ-6: Prescribed Burn Safety Procedures:</b> Prescribed burns will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP).	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>An IAP will be prepared for this project and crews will follow all included safety procedures.</i>			
<b>MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</b> Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>Emission reduction measures will be used.</i>			

## EC-4: ARCHEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact CUL-1:</b> Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, 3.5	LTS	<u>SPR CUL-1, 7, 8, MM CUL-2</u>	Yes	LTS	<input checked="" type="checkbox"/>

<p>The proposed treatments include mechanical and prescribed broadcast burning, which could damage built historical resources. A records search was conducted as per SPR CUL-1. Archaeological surveys of the project area were made. An ASR was prepared for the project and if any sites were located, they were afforded protections. These protections shall be incorporated into the operations proposed. SPR-8 will require that all crew members and contractors are trained on the protection of sensitive archaeological, historical, or tribal cultural resources.</p> <p>As per Mitigation Measure CUL-2, any archaeological resource discovered during treatments will be given 100 ft avoidance, and the site will be reviewed by an archaeologist. The potential for built historical period resources to be damaged during these activities has been assessed in the PEIR. The impact of this project is within the scope of the PEIR because the treatment activities are the same and protection measures have been designed by an archaeologist.</p>						
<p><b>Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources</b></p>	Impact CUL-2, 3.5	SU	SPR CUL-2, 3, 4, 5, 8 MM CUL- 2	Yes	LTS	<input checked="" type="checkbox"/>
<p>Vegetation treatments include mechanical and broadcast burning treatments that could disturb the ground, potentially resulting in damage to unknown archaeological resources. As per Mitigation Measure CUL-2, any archaeological resource discovered during treatments will be given 100 ft avoidance, and the site will be reviewed by an archaeologist. SPR-8 will require that all crew members and contractors are trained on the protection of sensitive archaeological, historical, or tribal cultural resources.</p> <p>SPR CUL-1 requires an archaeological and historical resource record search to be conducted. A property-wide resource records check was conducted by the Northwest Information Center on 6/2/2022 (NWIC File #21-1217).</p> <p>SPR CUL-2 requires contacting geographically affiliated Native American Tribes. Responses can help identify and protect resources so that a substantial adverse change in significance does not occur to unique archaeological resources. Tribes were contacted on October 12<sup>th</sup>, 2022, November 7<sup>th</sup>, 2022, and June 1<sup>st</sup>, 2023. Responses were received on October 27<sup>th</sup>, 2022, and November 14<sup>th</sup>, 2022, from Sherwood Valley Band of Pomo Indians, and June 9<sup>th</sup>, 2023, from Manchester/Point Arena Band of Pomo Indians.</p> <p>As per SPR CUL-3, pre-field research was conducted as part of the cultural resource investigation to assist with the success of field surveyors in identifying archeological resources during SPR CUL-4 archaeological surveys. For cultural resources identified in the archaeological surveys that cannot be avoided, SPR CUL-5 requires an archaeologist to notify the tribes and assess whether an archaeological find qualifies as a unique archaeological resource, an historic resource, or, in coordination with said tribes, as a tribal cultural resource.</p> <p>Conducting record searches, contacting Native American groups, conducting cultural resource surveys, and avoiding known unique archaeological and subsurface historical resources would avoid or minimize the risk of disturbance, damage, or destruction of these resources by identifying, avoiding, or protecting these sensitive subsurface resources from damage that could be caused by treatment activities. Additionally, implementation of Mitigation Measure CUL-2 would reduce impacts to unknown unique archaeological or subsurface historical resources because it would protect in place, recover information, record, or otherwise treat the discovered resource appropriately.</p> <p>By utilizing these SPRs and mitigation measures, we will avoid substantial adverse change in the significance of unique archaeological resources or subsurface historical resources.</p>						
<p><b>Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource</b></p>	Impact CUL-3, 3.5	LTS	SPR CUL-1, 2, 3, 5, 6, 8	Yes	LTS	<input checked="" type="checkbox"/>

<p>Vegetation treatments include mechanical and broadcast burning treatments that could disturb the ground, potentially resulting in damage to unknown archaeological resources. SPR-8 requires that all crew members and contractors are trained on the protection of sensitive archaeological, historical, or tribal cultural resources.</p> <p>A records search was conducted as per SPR CUL-1. SPR CUL-2 requires that the proponent contact geographically affiliated Native American Tribes. Responses help identify and protect resources so that a substantial adverse change in significance does not occur to tribal cultural resources.</p> <p>As per SPR CUL-3, pre-field research was conducted as part of the cultural resource investigation to assist with the success of field surveyors in identifying archeological resources during SPR CUL-4 archaeological surveys. For cultural resources identified in the archaeological surveys that cannot be avoided, SPR CUL-5 requires an archaeologist to notify the tribes and, in coordination with said tribes, assess whether an archaeological find qualifies as a tribal cultural resource.</p> <p>If a tribal cultural resource is identified within a treatment area and cannot be avoided, under SPR CUL-6, the project proponent, in consultation the culturally affiliated tribes, will develop effective protection measures for important tribal cultural resources located within treatment areas.</p> <p>The potential for these activities to cause a substantial adverse change in the significance of a tribal cultural resource was examined in the PEIR. The impact of this project was determined to be the same as the PEIR because the treatment activities are the same and the potential resources are the same. Implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource and impacts would be less than significant.</p>						
<b>Impact CUL-4: Disturb Human Remains</b>	Impact CUL-4, 3.5	LTS	N/A	Yes	LTS	<input checked="" type="checkbox"/>
<p>There is a potential for treatment activities to uncover human remains due to the nature of the treatment activities. The NWIC record search did not find any burial sites or prehistoric sites. The NAHC was contacted on November 7<sup>th</sup>, 2022 to request a review of the Sacred Lands File with regard to the project with no response from NAHC indicating Sacred Sites exist within the project area.</p> <p>Per California Health and Safety Code (HSC 7050.5(b)), in the event human remains or burials are encountered, all work shall cease, and the Mendocino County Coroner’s office and CAL FIRE archaeologist shall be contacted. Work will not occur until clearance is granted.</p>						
<b>Other Impacts to Archeological, Historical, and Tribal Cultural Resources:</b> Would the project result in other impacts to archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?			none	No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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<p><b>SPR CUL-1 Conduct Record Search:</b> For treatments led by CAL FIRE, an archaeological and historical resource record search will be conducted per the “Archaeological Review Procedures for CAL FIRE Projects”. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>An Archaeological Records Check Request was completed by Jessika Akmenkalns. NWIC Record Search: June 2, 2022 (NWIC File No. 21-1217)</i></p>			
<p><b>SPR CUL-2 Contact Geographically Affiliated Native American Tribes:</b> The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List, which may be obtained from the CAL FIRE website, as appropriate. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>The NAHC was contacted on 7/1/22 for a contact list. All parties on this list were contacted on October 12th, 2022, November 7th, 2022, and June 1st, 2023.</i></p>			
<p><b>SPR-CUL-3 Pre-field Research:</b> The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. This SPR applies to all treatment activities and treatment types</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>Literature, ethnographic data, GLO maps, historic maps, lidar, past project maps, old logging records, and knowledge from those with experience working in the project areas were reviewed during pre-field research.</i></p>			
<p><b>SPR CUL-4 Archaeological Surveys:</b> The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>The general approach was a map based on buffering the project sites and designating high, medium, and low probability areas to guide the surveyors in the field. The surveyors could evaluate an area and upgrade or downgrade their survey intensity, but this was meant to ensure coverage and provide a guide to intensity.</i></p> <p><i>The GIS data available incorporates prior Archaeologists’ property-wide baseline maps and the 5-year property wide updates that JDSF made. The GIS data also has the Author’s prefield research for JDSF from archival maps, survey records, and local books. Contour maps were the primary base map, though Lidar was used to supplement.</i></p> <p><i>Complete, General, Cursory, and Intuitive intensity were used in different locations. The maps described above were assembled and used for baseline guidance. Survey intensity would be modified by the field contextual conditions, adding promising areas or downgrading more marginal ones.</i></p> <p><i>As a starting point, areas delineated as ‘high probability’ were surveyed at the General level with focused areas of Complete. Complete surveys seek to cover the area in ½ chain (33ft / 10m) transects, while General seeks to cover in transects 1 – 1.5 chains (66ft -99ft / 20-30m) apart. Where ground coverage does not afford looks at the bare mineral soil, scrapes are used to provide at least a 9-10sq ft / 1 sq meter look.</i></p>			

<p><i>The 'medium probability' was meant for a mixture of General near the 'High' and becoming Cursory further away at the margins of the area. While the general intensity is described above, a cursory more looks for localized features to investigate. The 'low probability' was intended to be a blend of cursory or intuitive. Transect lines 100-150ft apart (30-50m) through the unit were walked, with focus given to promising terrain features.</i></p> <p><i>Five cultural resource surveyors surveyed the six sites for this project. All surveyors were trained through Cal Fire's Archeological Training course #178. Ben Harris, State Archeologist, was consulted as well.</i></p>			
<p><b>SPR CUL-5 Treatment of Archaeological Resources:</b> 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 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. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>Tribes were contacted on October 12th, 2022, November 7th, 2022, and June 1st, 2023. Responses were received on October 27th, 2022 and November 14th, 2022 from Sherwood Valley Band of Pomo Indians, and June 9th, 2023 from Manchester/Point Arena Band of Pomo Indians.</i></p>			
<p><b>SPR CUL-6 Treatment of Tribal Cultural Resources:</b> If a tribal cultural resource is identified within a treatment area, and cannot be avoided, the project proponent in consultation the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>Appropriate protection measures have been developed and reviewed by the state archeologist and tribes and responses have been incorporated into the ASR.</i></p>			
<p><b>SPR CUL-7 Avoid Built Historical Resources:</b> 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. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>Flag and avoid protection measures will prevent significant impacts to built historical resources, as reviewed by the state archeologist.</i></p>			
<p><b>SPR CUL-8 Cultural Resource Training:</b> The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><b>MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</b></p>			
	Yes	<u>CAL FIRE</u> During-Post	<u>CAL FIRE</u>

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 professional archaeologist or CAL FIRE archeological trained Registered Professional Forester will assess the significance of the find.

*Per item 10 of the ASR requires archeological trained professionals on site for certain activities. Per California Health and Safety Code (HSC 7050.5(b)), in the event human remains or burials are encountered, all work shall cease, and the Mendocino County Coroner’s office and CAL FIRE archaeologist shall be contacted. Work will not occur until clearance is granted. In all areas where prescribed burning occurs, a post-burn archeological survey will take place to at least a cursory level. The survey will be documented as a memorandum to the ASR, including coverage maps.*

## EC-5: BIOLOGICAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications</b>	Impact BIO-1, 3.6	LTS	<u>SPR BIO-1, 2, 7, 9</u> <u>SPR AQ-3, 4,</u> <u>SPR GEO-1, 3, 4, 5, 7</u> <u>SPR HYD-5</u> <u>MM BIO-1a, 1b, 1c</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on Special-Status plant species either directly or indirectly through habitat modifications. As part of SPR BIO-1, a data review performed by a California Native Plant Society (CNPS) Certified Botanist has identified forty-four (44) special-status plant species with a moderate to high potential to be found within the proposed treatment areas, as described in the following section. Habitat components include not only vegetation community, but climate, aspect and soil. Therefore, though a plant such as <i>Carex arcta</i>, may be found within the redwood forest community, it would have an unlikely chance of occurring because the climate within the project area is on average warmer than where it prefers in Humboldt and Del Norte counties. Or conversely, a plant might be found within the redwood forest (such as <i>Erythronium revolutum</i>), but it prefers moist, perennially wet conditions which may not be present within the project area because it is located entirely on a ridge top. These factors are all considered when determining whether a plant has the potential to be found. The complete scoping list evaluating all potential plants can be found in Appendix B. Additionally, a floristic survey was performed as part of SPR BIO-1, which identifies every plant encountered through the blooming window within the project area. This complete survey would capture any plant, regardless of whether it is on the scoping list or not, to ensure all Special-Status plants are discovered.</p>						

Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments, because the same treatment activities would occur. However, treatment frequency and intensity can determine whether effects on certain plant species are beneficial or adverse. Initial treatment that reduces overgrowth, opens the tree canopy to allow more light penetration, or removes invasive competitors can be beneficial for some special-status plant populations.

SPR BIO-7 would apply to all treatment activities, including maintenance treatments; it requires protocol-level surveys for special-status plants to be conducted prior to implementation of mechanical, manual, herbicide, and prescribed burning treatments. Pursuant to SPR BIO-7, surveys would not be required for those special-status plants not listed under CESA or ESA, if the target special-status plant species is an herbaceous annual species, stump-sprouting species, or geophyte species, and 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 would 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.

Eight of the 44 special-status plant species with high or moderate potential to occur within the treatment areas are herbaceous annual species or geophytes, as indicated in Table 2. Impacts on these species would be avoided by implementing non-ground-disturbing treatment activities (e.g., manual treatment activities) during the dormant season (i.e., when the plant has no above ground parts), which would generally occur during the winter. Ground-disturbing treatment activities (e.g., mechanical treatments, construction of control lines for broadcast burning) may result in impacts on these plant species even when dormant and would not be conducted without prior implementation of SPR BIO-7. If non-ground-disturbing treatments cannot be completed in the dormant season and would be implemented during the growing period of these annual and geophyte species, protocol surveys (per SPR BIO-7) and avoidance of any identified plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented, as described below. The remaining 36 of the 44 special-status plant species that have potential to occur within the treatment areas are perennial species, which could not be avoided in the same manner as herbaceous annual species or geophytes; therefore, protocol-level surveys under SPR BIO-7 would be necessary to identify them prior to implementing treatment activities regardless of the timing of treatments.

Where special-status plants are identified during these surveys (SPR BIO-7), Mitigation Measures BIO-1a and BIO-1b would be implemented to avoid loss of identified special-status plants. Per Mitigation Measures 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, manual, herbicide, and prescribed burning treatments would not occur unless a qualified RPF or biologist determines, based on substantial evidence, that the species would benefit from treatment in the occupied habitat area. In the case of plants listed pursuant to CESA or ESA, the determination of beneficial effects would need to be made in consultation with the California Department of Fish and Wildlife (CDFW) and/or USFWS. If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, under the specific conditions described under Mitigation Measures BIO-1a and BIO-1b, additional impact minimization and avoidance measures or design alternatives to reduce impacts may be identified. An evaluation of the appropriate treatment design and frequency to maintain habitat function for special-status plants will be carried out by a qualified RPF or botanist. Therefore, habitat function for special-status plants would be maintained because treatment activities and maintenance treatments would be designed to ensure that treatments, including follow-up maintenance, maintain habitat function for the special-status plant species present. In addition, SPR BIO-2 would require biological resource training for workers and SPR BIO-9 would prevent noxious weed spread from treatment activities to areas that have Special-Status plants.

The potential for treatment activities to result in adverse effects on special-status plants was examined in the PEIR. This impact on special-status plants is within the scope of the PEIR, because, within the boundary of the project area, habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), and the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR.

PEIR specific

Project specific

	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications</b></p>	<p>Impact BIO-2, 3.6</p>	<p>LTS</p>	<p><u>SPR BIO-</u> 1, 2, 3, 4, 5, 8, 10, 11 <u>SPR HYD-</u> 1, 3, 4, 5 <u>SPR HAZ-</u> 5, 6 <u>MM BIO-</u> 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4</p>	<p>Yes</p>	<p>LTS</p>	<p><input checked="" type="checkbox"/></p>
<p>Initial vegetation treatments and follow-up maintenance treatments could result in direct or indirect adverse effects on special-status wildlife species and habitat suitable for these species within a treatment area, as described in the following sections. As part of SPR BIO-1, a data review performed by the JDSF biologist has identified thirty-five (35) special-status wildlife species with a moderate to high potential to be found within the proposed treatment areas, as described in the following section. Potential impacts resulting from maintenance activities would be like those resulting from initial vegetation treatments because the same treatment activities would occur.</p> <p><u>Special-Status Amphibians</u></p> <p>Four special-status amphibian species may occur within the treatment area: northern red-legged frog, foothill yellow-legged frog, coastal tailed frog and red-bellied newt. Habitat exists for all four species within the proposed treatment areas within watercourses and wet areas. In addition, red-bellied newts can be found within terrestrial environments. Adult and juvenile northern red-legged frogs are also known to travel through upland habitat (e.g., riparian, woodland, grassland) to move between breeding and nonbreeding sites (e.g., other ponds, deep pools in streams, moist and cool riparian understory, burrows) for access to refugia and foraging habitat or to disperse to new breeding locations.</p> <p>The foothill yellow-legged frog is a highly aquatic species which inhabits a variety of small to large sized streams with rocky or cobble substrate, from sea-level to 6,000 feet in parts of Oregon and California. They are found in a variety of riparian, oak-woodland, conifer, coastal scrub, mixed chaparral, and meadow stream habitats. They use permanent pools of streams, ponds, and marshes with extensive shoreline vegetative cover. Adults bask on sunny exposed rock surfaces near streams and dive into the water when disturbed. Breeding can begin as early as March in warm coastal streams and extend into May, and larvae can hatch in as little as 5 or more than 35 days depending on temperature. Reproduction is aquatic and egg-laying occurs on streams and rivers (not ponds or lakes), with peak season occurring April to July. Egg clusters are attached to the downstream side of rocks in shallow, slow moving water near stream edges. They occasionally attach their eggs on vegetation as well. Rearing habitat for tadpoles consists of sunny low-gradient gravel and cobble bars along vegetated banks. Tadpoles eat diatoms and filamentous algae. Post-metamorphic frogs eat terrestrial and aquatic invertebrates such as flies, moths, mosquitos, ants, beetles, water striders, snails, arachnids. Time to metamorphosis takes 3 to 4 months, from July to October. This species of frog is rarely found far from permanent water, even on rainy nights. Home range is limited to about 33 feet in the farthest direction. They also make seasonal upslope migrations during the winter period to smaller watercourses to avoid high flows and habitat inundation (Morey 2000) (CDFW 2018).</p>						

SPR BIO-10 would require a qualified biologist or RPF of record to survey for the presence of red-legged frogs and foothill yellow-legged frogs. The survey will be conducted no more than 14 days prior to the beginning of treatment activities. To meet Mitigation Measure BIO-2b, JDSF would require flagging areas for avoidance, relocation of individual animals by a qualified RPF or biologist with a valid CDFW scientific collecting permit, and/or other measures recommended by CDFW as necessary to avoid injury to or mortality of red-legged frogs and foothill yellow-legged frogs.

Additionally, WLPZs ranging from 50 to 150 feet adjacent to all Class I-III watercourses within the treatment areas would be implemented per SPR HYD-4. Also, pursuant to SPR HYD-4, 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). SPR GEO-1 would be implemented, which would limit mechanical and herbicide treatments before, during, or after precipitation events. SPR BIO-2 would train workers in identifying red-bellied newts. SPR BIO-10 would require a qualified biologist or RPF of record to survey for the presence of red-bellied newts no more than 14 days prior to the beginning of treatment activities. If red-bellied newts are found during protocol level surveys, relocation of individuals by a qualified RPF or biologist with a valid CDFW scientific collecting permit would occur, and/or other measures recommended by CDFW as necessary to avoid injury to or mortality.

Habitat function for the special-status amphibians would be maintained because treatment activities and maintenance treatments would not occur within aquatic habitat and SPRs HYD-4, BIO-1, BIO-2, BIO-10 and GEO-1 would be implemented.

#### Special-Status Birds

Seventeen special-status bird species may occur within the treatment area: northern goshawk, tricolored blackbird, golden eagle, great egret, great blue heron, marbled murrelet, bald eagle, osprey, long-eared owl, Vaux's swift, olive-sided flycatcher, white tailed kite, least willow flycatcher, peregrine falcon, purple martin, yellow warbler and northern spotted owl (Table 2). Osprey and northern spotted owl are known to nest in locations near the proposed treatment areas.

Treatment activities, including mechanical treatments, manual treatments, herbicide treatments, and prescribed burning conducted during the nesting bird season (February 1–August 31) could result in direct loss of active nests if trees or shrubs containing nests are removed, treated with herbicide, or burned. If a nest structure is observed during SPR BIO-12, it shall be retained. Indirect disturbances to active nests may occur from treatment activities including mechanical treatments, manual treatments, herbicide treatments, and prescribed burning, due to auditory and visual stimulus (e.g., heavy equipment, chain saws, vehicles, personnel) potentially resulting in abandonment and loss of eggs or chicks.

Per SPR BIO-1, if it is determined that adverse effects on habitat suitable for nesting special-status birds can be clearly avoided by physically avoiding habitat suitable for the species or conducting treatments outside of the season of sensitivity (i.e., nesting bird season), then no mitigation would be required. Additionally, no manual, mechanical, herbicide or prescribed burn operations will be conducted within 1/4 mile of any Northern Spotted Owl activity center during their breeding season (February 1 – July 31).

For other nesting special-status birds, adverse effects would be clearly avoided for treatments that would occur outside of the nesting bird season (February 1–August 31). If conducting treatments outside of the nesting bird season is determined to be infeasible for certain treatments, project proponent will implement BIO-12 to survey for active bird nests. 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.

If no active bird nests are observed during focused surveys, then additional avoidance measures for these species would not be required. If active special-status bird nests are observed during focused surveys, then Mitigation Measures BIO-2a (for bald eagle, marbled murrelet, osprey and northern spotted owl) would be implemented.

Habitat function for special-status birds would be maintained because treatment activities would not result in removal of trees (i.e., conifers, hardwoods) or snags 12 inches DBH or greater, which would be the most likely features to be used by these species due to the cover provided by larger trees. Additionally, treatments within

riparian habitat (which provides nesting habitat for several of the special-status bird species that may occur in the treatment areas [e.g., yellow warbler]) that is included within a WLPZ would be limited pursuant to SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75 percent surface cover).

If Mitigation Measure BIO-2a is required for treatment, Jackson Demonstration State Forest would contact CDFW to seek technical input on the determination that habitat function would be maintained for marbled murrelet, bald eagle, osprey and northern spotted owl. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### Special-Status Invertebrates

Four special-status invertebrates may occur within the proposed treatment areas: Crotch's bumble bee, western bumble bee, Mendocino leptonetid spider and the Pomo bronze shoulderband (snail). MM Bio-2f does not apply to the Pomo bronze shoulderband snail or Mendocino leptonetid spider because neither are state or federally listed.

Habitat requirements for *Bombus crotchii* are open grassland and scrub habitats while requirements for *Bombus occidentalis occidentalis* are meadows and grasslands with abundant floral resources (Hatfield et. Al. 2018). The project area is a closed-canopy forest with neither meadows, open grassland, nor scrub habitat contained within. One area of the project is adjacent to Bob Woods Meadow. The meadow will not be treated as part of this project and is not within the project boundaries.

Thinning and burning forested areas adjacent to Bob Woods Meadow may increase bumble bee forage potential for bees occupying the adjacent meadow since flowering plants such as ceanothus have been observed revegetating under the forest canopy after mastication and broadcast burning of a nearby selection harvested THP. Herbicide application may be used to treat invasive weed populations in order to promote native plants, but its use will not significantly reduce floral resources adjacent to bumble bee habitat.

No habitat required for special-status bees will be treated, therefore, MM BIO-2g does not apply.

#### Special-Status Fish

Four special-status fish species have habitat that occurs within the proposed treatment areas: Steelhead – Northern California coast DPS, coho salmon – Central Coast ESU, chinook salmon – California Coastal ESU, and pacific lamprey (Table 2). The potential for treatment activities and maintenance treatments to result in adverse effects on special-status fish was examined in the PEIR.

Per SPR BIO-1, if it is determined that adverse effects on special-status fish can be clearly avoided by physically avoiding habitat for these species, then mitigation would not be required. WLPZs ranging from 50 to 150 feet adjacent to all Class I and Class II streams within the treatment areas would be implemented per SPR HYD-4 and its project-specific refinement to include the implementation of no-disturbance buffers of 300 feet around all ponds (including ponds on adjacent private property where the buffer extends into a treatment area). Adverse effects on special-status fish would be clearly avoided through implementation of this SPR and further mitigation would not be required.

Habitat function for special-status fish would be maintained because treatment activities and maintenance treatments would not occur within aquatic habitat and treatments within WLPZs adjacent to treatment areas would be limited pursuant to SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75 percent surface cover, no treatment within 300 feet of ponds). This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### Special-Status Mammals

Six special-status mammal species have habitat that occurs within the proposed treatment areas: Sonoma tree vole, pallid bat, ringtail, Humboldt marten, fisher, and Townsend’s big-eared bat. (Table 2). The potential for treatment activities and maintenance treatments to result in adverse effects on special-status mammals was examined in the PEIR.

Habitat potentially suitable for Sonoma tree vole is present in the proposed treatment areas, including Douglas-fir Forest. Sonoma tree voles prefer old growth or mixed old growth and mature forest habitat; however, the species can occur in other types and ages of forests, including young growth forests. While it is possible that this species could nest in large trees (especially Douglas-fir) on the project site, treatment activities would not result in removal of any living trees greater than 12 inches DBH. Small trees (<12 inches DBH) with nest structures identified during protocol-level surveys per SPR BIO-10 shall be retained. Adverse effects on Sonoma tree voles are unlikely to occur and mitigation would not be required.

Habitat function for Sonoma tree vole would be maintained because treatment activities and maintenance treatments would not result in removal of living trees (i.e., conifers, hardwoods) greater than 12 inches DBH, which would retain the essential range of habitat features by retaining the larger trees.

Habitat potentially suitable for Townsend’s big-eared bat is present within forest habitat, rocky areas, and human-made structures (e.g., barns, bridges) in the treatment areas. Per SPR BIO-1, if it is determined that adverse effects on special-status bats can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., maternity season), then mitigation would not be required. Adverse effects on special-status bat maternity roosts would be clearly avoided by conducting initial and maintenance treatments outside of the bat maternity season (April 1–August 31; California Department of Transportation 2004).

Treatment activities, including mechanical treatments, manual treatments, herbicide treatments, and prescribed burning using Utility Task Vehicles (UTVs), conducted within habitat suitable for bats during the bat maternity season (April 1–August 31) could disturb active bat roosts from auditory and visual stimuli (e.g., heavy equipment, chain saws, vehicles, personnel) or smoke (e.g., prescribed burning) potentially resulting in abandonment of the roost and loss of young.

If mechanical, manual, herbicide, or prescribed burning treatments would occur during the bat maternity season, then SPR BIO-10 would apply, and focused surveys for these species would be conducted within suitable habitat areas prior to initiation of manual, mechanical, herbicide, and prescribed burning treatments. If special-status bat roosts are identified during focused surveys, Mitigation Measure BIO-2b for special-status bats would be implemented.

Under Mitigation Measure BIO-2b, a no-disturbance buffer of 250 feet would be established around active bat roosts and mechanical treatments and manual treatments would not occur within this buffer. A no-disturbance buffer of 250 feet is necessary to protect sensitive roosts; this buffer size was adjusted to be larger than the general no-disturbance buffer of 100 feet provided in Mitigation Measure BIO-2b in order to provide adequate protection such that impacts would be less than significant under CEQA. If special-status bat roosts are identified in a treatment area where prescribed burning is planned, prescribed burning activities would be implemented outside of the bat breeding season, which is April 1–August 31.

Habitat function for special-status bats would be maintained because treatment activities and maintenance treatments would not result in removal of living trees (i.e., conifers, hardwoods) 12 inches DBH or greater, which would be the most likely features to be used by this species due to the cover provided by larger trees.

Treatments will not result in impacts to special status species based on implementation of applicable SPRs (BIO-1, BIO-10, BIO-12, etc.). Additionally, habitat function will be retained as the location, essential habitat features, and species supported will not substantially change as a result of treatments.

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact

<p><b>Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function</b></p>	<p>Impact BIO-3, 3.6</p>	<p>LTS</p>	<p><u>SPR BIO-1, 2, 3, 4, 5, 6, 8, 9</u> <u>SPR HYD-4, 5</u> <u>MM BIO-3a, 3b, 3c</u></p>	<p>Yes</p>	<p>LTS</p>	<p><input checked="" type="checkbox"/></p>
<p>Initial vegetation treatments and maintenance treatments could result in a less than significant adverse effect on Riparian Habitat or other sensitive natural communities. Riparian buffers have been placed around all watercourses and springs. Equipment is excluded from operating within the buffers and no manual treatment will occur within the buffers. Backing fires may occur within some of the riparian buffers but will not be ignited from within them. Due to these protections of the watercourses and wet areas and their adjoining riparian habitat, the impact will be less than significant.</p> <p>The Redwood Forest and Woodland natural community is ranked G3/S3, qualifying it as a sensitive natural community. The project proponent has conducted a CDFW protocol-level Special Status Plants and Sensitive Natural Communities survey prior to treatment within the proposed treatment areas (SPR BIO-7). SPR BIO-2 would require biological training to field workers to help them recognize rare plants so they might readily identify new detections during project work.</p> <p>Based on scoping surveys done under SPR BIO-1, twelve sensitive natural communities have a moderate to high potential to be present within the proposed treatment areas.</p> <p>The Sensitive Natural Communities within the project area are Redwood Forest Alliance and Tanoak Forest Alliance (both S3). Membership rules for Redwood Forest Alliance state that there must be 50% relative cover in the Redwood tree canopy, or more than 30% relative cover with other conifers. Membership rules for the Tanoak Forest Alliance state that there must be 50% relative cover in the tanoak canopy and over 10% absolute cover in the tree layer. Neither one of these Sensitive Natural Communities will have their relative cover reduced below these levels through any of the treatment prescriptions proposed for the VTP.</p> <p>Riparian habitat is present adjacent to streams in all the proposed treatment areas. Under SPR HYD-4, WLPZs ranging from 50 to 150 feet would be established adjacent to all Class I and Class II streams and springs for manual, mechanical, and pile burning treatments, which would limit the extent of treatment activities within riparian habitat. While these SPRs would reduce potential impacts on riparian habitat, the extent of riparian habitat within the treatment areas has not been mapped and riparian habitat may be present outside of the areas incorporated within WLPZs. As a result, prior to implementation of treatment activities, SPR BIO-3 would need to be implemented to identify and map the extent of riparian habitat within the treatment areas. As required under SPR BIO-4, treatments in riparian habitats would retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation and would largely be limited to removal of uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants).</p> <p>Additionally, the project will focus on removing trees less than 12" DBH trees and shrubs, which will not alter the composition of any forested habitat. The potential for treatment activities to result in adverse effects on sensitive habitats, as described above, was examined in the PEIR. This impact on sensitive habitats is within the scope of the PEIR. SPRs that apply are SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4, SPR BIO-6, SPR BIO-9, SPR GEO-1, SPR GEO-3, SPR GEO-4, SPR GEO-5, and SPR HYD-4.</p>						
			<p>PEIR specific</p>		<p>Project specific</p>	
	<p>Identify location of impact Analysis in the PEIR</p>	<p>Identify impact Significance in the PEIR</p>	<p>SPRs &amp; MMs applicable to the impact</p>	<p>Does the Impact Apply to the project</p>	<p>Identify Impact Significance for the Treatment Project</p>	<p>No New Impact</p>

			analysis in PEIR	Treatments proposed		
<b>Impact BIO-4: Substantially Affect State or Federally Protected Wetlands</b>	Impact BIO-4, 3.6	LTS	<u>SPR BIO-1</u> <u>SPR HYD-1, 3, 4,</u> <u>MM BIO- 4</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>The treatment activities have the potential to negatively impact wetlands and riparian habitats. With the inclusion of the SPRs listed in the table above, this impact will be less than significant. These SPRs include the development of slope dependent, watercourse, and wet area protections.</p> <p>A qualified RPF or biologist will identify and establish a buffer around wetland features, with a minimum buffer width of 25 feet that may be larger if deemed necessary.</p> <p>Within this buffer, soil disturbance is prohibited, therefore, mastication and equipment/vehicle access and staging will be prohibited. Manual treatment will also not occur.</p> <p>Prescribed (broadcast) burning may be implemented in some wetlands if it is determined by a qualified RPF or biologist that:</p> <ul style="list-style-type: none"> <li>• No special-status species are present in the wetland habitat,</li> <li>• The wetland habitat function would be maintained,</li> <li>• The prescribed burn is within the normal fire return interval for the wetland vegetation types present,</li> <li>• Fire containment lines and pile burning are prohibited within the buffer, and</li> <li>• No fire ignition (and associated use of accelerants) will occur within the wetland buffer.</li> </ul>						
			PEIR specific		Project specific	
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries</b>	Impact BIO-5, 3.6	LTS	<u>SPR BIO-1, 4, 5, 10, 11</u> <u>SPR HYD-1, 4</u> <u>MM BIO- 5</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>The treatment activities could result in direct or indirect adverse effects on wildlife corridors because suitable habitat is present in the treatment area. In fact, it is expected that some wildlife corridors for certain species will ultimately be improved by the treatment activities. For example, the understory is expected to be more open after treatments, allowing travel for some bird species to improve. By protecting the forest ecosystem as a whole, the habitat corridors may experience treatment-related noise and disturbance, leading to temporary changes in migration or movement patterns, however, corridors will be better protected from high intensity wildfire in the future. This will conserve the corridors in the long run and promote a healthy, fire resilient ecosystem. Furthermore, with the inclusion of the</p>						

<p>riparian zone protections pursuant to SPR HYD-4, there will be areas of intact wildlife corridors which connect multiple treatment areas to untreated landscapes. SPRs that apply to project impacts under Impact BIO-5 are BIO-1, BIO-4, BIO-5, BIO-10, HYD-1, HYD-4. Any nursery site identified during BIO-10 surveys would be protected per MM BIO-5.</p>						
			PEIR specific		Project specific	
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife</b>	Impact BIO-6, 3.6	LTS	<u>SPR BIO-1, 2, 3, 4, 5, 12</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife, including nesting birds, because habitat suitable for these species is present throughout treatment areas. Treatment activities, including mechanical treatments, manual treatments, herbicide treatments, and prescribed burning during the nesting bird season (February 1– August 31) could result in direct loss of active nests or 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 chicks.</p> <p>SPR BIO-12 would apply, and for treatments implemented during the nesting bird season, a survey for common nesting birds will be conducted within the treatment area by a qualified RPF or biologist prior to treatment activities. If no active bird nests are observed during focused surveys, then additional avoidance measures would not be required. If active nests of common birds or raptors are observed during focused surveys, disturbance to the nests will be avoided by establishing an appropriate buffer around the nests, modifying treatments to avoid disturbance to the nests, or deferring treatment until the nests are no longer active as determined by a qualified RPF or biologist.</p> <p>Because treatments would be implemented within relatively small proportions of the extensive ranges of common species, and suitable habitat would remain available to these species across the broader landscape surrounding treatment areas, the magnitude of these potential losses would not substantially reduce the overall abundance of any common wildlife species. Additionally, implementation of SPRs BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 would limit the loss or degradation of some high-quality breeding habitats for special-status wildlife that would also benefit common species, and implementation of SPR BIO-12 would protect common nesting birds, including raptors. Therefore, treatment activities would not substantially reduce the population size of or availability of suitable breeding habitat for any common wildlife species, including nesting birds.</p>						
			PEIR specific		Project specific	
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact

<b>Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources</b>	Impact BIO-7, 3.6	No Impact	<u>SPR AD- 3</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>The potential for treatment activities to result in conflicts with local policies or ordinances was examined by the project preparer. The only applicable policy relevant to the protection of biological resources is the Jackson Demonstration State Forest Management Plan. Given its geographic location, vegetation types, and demonstration mandate, the Jackson Demonstration State Forest is in a unique position to develop habitats that contribute to improvement in the population viability of certain species of concern and to protect or restore other forest values. Opportunities exist for habitat restoration and management for species that may or may not presently occur on the forest. Similarly, efforts to control the establishment and spread of invasive weed species will contribute to the protection of biological diversity from both a local and regional perspective. All projects implemented under the CalVTP that are subject to local policies or ordinances would be required to comply with them, per SPR AD-3.</p>						
			PEIR specific		Project specific	
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan</b>	Impact BIO-8, 3.6	No Impact	N/A	No	N/A	<input checked="" type="checkbox"/>
<p>This impact does not apply to the proposed project because the treatment areas are not within the plan area of any adopted habitat conservation plan or natural community conservation plan. Therefore, this impact does not apply to the proposed project.</p>						
<b>Other Impacts to Biological Resources:</b> Would the project result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR BIO-1: Review and Survey Project-Specific Biological Resources.</b>	Yes	<u>CAL FIRE</u>	<u>CAL FIRE</u>
1. <b>Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.</b>	Yes	Prior-During	

<p><b>2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided.</b></p> <p>This SPR applies to all treatment activities and treatment types.</p>	<p>No</p>		
<p><i>Scoping: Prior to surveys, the following literature and database searches were completed to assess the potential for sensitive natural communities and special-status species:</i></p> <ul style="list-style-type: none"> <li>• <i>Aerial photographs (Google Earth 2023 and NAIP 2020, NAIP 2022)</i></li> <li>• <i>California Natural Diversity Database (CDFW 2022, CNDDDB)</i></li> <li>• <i>California Native Plant Society Electronic Inventory (CNPS 2022)</i></li> <li>• <i>A Manual of California Vegetation Online (CNPS 2022)</i></li> <li>• <i>Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)</i></li> </ul> <p><i>Scoping lists and database searches (i.e. CNDDDB, CNPS) were based on Fort Bragg, Elk, Albion, Sherwood Peak, Dutchmans Knoll, Inglenook, Comptche, Northspur, Albion, Navarro, Longvale, Greenough Ridge, Burbeck, Bailey Ridge and Navarro 7.5' USGS Quadrangle maps. Additionally, the CAL VTP Special-Status Plant Species Known to Occur in the Northern California Coast Ranges Ecological Section (M261B) within the Treatable Landscape Scoping Lists.</i></p> <p><i>Site visits evaluated the presence of suitable habitat for special-status species as well as observation of specific species. Suitable habitat conditions are based on physical and biological conditions of the site, as well as the professional expertise of the surveyor. The potential for each special-status species to occur in the Survey Area was ranked based on the following criteria:</i></p> <ul style="list-style-type: none"> <li>• <i>None. No habitat components meeting the species requirements are present (such as coastal marsh or coastal dunes).</i></li> <li>• <i>Unlikely. Few to none of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. Habitat components include climate, soil and aspect. The species is not likely to be found on the site.</i></li> <li>• <i>Moderate. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. Habitat components include climate, soil and aspect. The species has a moderate probability of being found on the site.</i></li> <li>• <i>High. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.</i></li> <li>• <i>Present. Species is observed on the site or has been recorded (database observation) on the site in the recent past.</i></li> </ul> <p><i>Surveying methods were based on Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). A seasonally appropriate floristic survey was performed.</i></p>			
<p><b>SPR BIO-2: Require Biological Resource Training for Workers.</b> The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> Prior-During</p>	<p><u>CAL FIRE</u></p>

<i>Worker Environmental Awareness Program trainings will be given to crews prior to and during treatment activities, informing them of sensitive biological resources identified in SPR – BIO 1 and proper avoidance measures in the treatment area.</i>			
<b>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.</b> If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided. This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>Sensitive natural communities were surveyed for as part of the 2018 Department of Fish and Wildlife Protocol for botanical surveys. The only Sensitive Natural Communities within the project area are Redwood Forest Alliance and Tanoak Forest Alliance (both S3).</i>			
<i>Membership rules for Redwood Forest Alliance state that there must be 50% relative cover in the Redwood tree canopy, or more than 30% relative cover with other conifers. Characteristic species include redwood (<i>Sequoia sempervirens</i>), Douglas-fir (<i>Pseudotsuga menziesii</i>), tanoak (<i>Notholithocarpus densiflorus</i>) and understory species such as sword fern (<i>Polystichum munitum</i>). Membership rules for the Tanoak Forest Alliance state that there must be 50% relative cover in the tanoak canopy and over 10% absolute cover in the tree layer.</i>			
<i>Neither one of these Sensitive Natural Communities will have their relative cover reduced through any of the treatment prescriptions proposed for the VTP.</i>			
<b>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.</b> Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions. This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>The project area contains class II and III waters and seeps/springs (given class II buffers) which will have WLPZ buffers identified with flagging prior to treatment. Implementation of SPR BIO -4 and SPR HYD -4 will establish equipment exclusion buffers in these areas and limit the intensity of treatment.</i>			
<b>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.</b> The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. These SPR requirements apply to all treatment activities and all treatment types. Additional measures will be applied to ecological restoration treatment types	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>The project is located outside Chaparral and Coastal Sage Scrub habitats and shall have no impact on these habitats.</i>			
<b>SPR BIO-6: Prevent Spread of Plant Pathogens.</b> 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 best management practices to prevent the spread of <i>Phytophthora</i> and other plant pathogens (e.g., pitch canker ( <i>Fusarium</i> ), goldspotted oak borer, shot hole borer, bark beetle). This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>

<i>Personnel utilized on this project will be advised of the need to ensure equipment coming to or leaving the project area is properly washed. It is most likely that personnel and equipment assigned to work on the project will be from the local area and the concern of pathogens entering from other areas will be low. However, because Fire Crews, Fuels Crews, associated equipment (chainsaws, hand tools, etc.), and vehicles could have been used in other portions of the state, either on fires or other fuel treatment projects, the crews will be advised to completely clean their equipment, tools, and vehicles before arriving at and leaving the project site.</i>			
<b>SPR BIO-7: Survey for Special-Status Plants.</b> 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." This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<i>44 special-status plant species returned from SPR BIO-1 that have the potential to be within the project area. Surveys to determine the presence or absence of special-status plant species will be conducted within 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.</i>			
<b>SPR BIO-8: Identify and Minimize Impacts in Coastal Zone ESHAs.</b> This SPR applies to all treatment activities and only the ecosystem restoration treatment type.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>The project is not within the coastal zone. Therefore, SPR BIO-8 is not applicable to this project.</i>			
<b>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> During-Post	<u>CAL FIRE</u>
<i>Personnel will be required to clean tools and equipment per SPR – BIO 9</i>			
<b>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.</b> 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) 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. This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<i>Habitat exists for a variety of special-status wildlife species within the project area. Pre-operational surveys shall be conducted within 14 days prior to any project preparation (e.g. control line installation) or project implementation to determine if special-status wildlife species</i>			

<p><i>and/or their structures supporting potential nurseries or nests are present within treatment areas. The following special status wildlife species identified in BIO – 1 will receive SPR BIO-10 focused surveys prior to project activities occurring in habitat with potential for occurrence:</i></p> <p><i>Southern Torrent Salamander</i>  <i>Coastal Tailed Frog</i>  <i>Northern Red-legged Frog</i>  <i>Foothill Yellow-Legged Frog</i>  <i>Red-Bellied Newt</i>  <i>Western Pond Turtle</i>  <i>Northern Spotted Owl (Strix occidentalis caurina),</i>  <i>Marbled Murrelet</i>  <i>Other special-status birds (Golden Eagle, Great Egret, Great Blue Heron, etc.)</i>  <i>Special Status Invertebrates</i>  <i>Ringtail</i>  <i>Sonoma Tree Vole</i>  <i>Fisher</i>  <i>Special Status Bats</i></p> <p><i>Surveys will identify and protect unique structures such as large basal hollows, old growth stumps, and tall trees close to water as potential habitat for bat maternity roosts, and heron and egret rookeries, for example.</i></p>			
<p><b>SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory).</b> This SPR applies only to prescribed herbivory and all treatment types.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><b>SPR BIO-12. Protect Common Nesting Birds, Including Raptors.</b> 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 or peak nesting season will be defined by the qualified RPF or biologist. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>If any special-status wildlife or species that are listed under ESA or CESA are found during the surveys, avoidance strategy will be implemented as per MM BIO-2a.</i></p>			
<p><b>MM BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA</b>                  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).</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>

<i>If any special-status plants or species that are listed under ESA or CESA are found during the surveys, avoidance strategy will be implemented as per MM BIO-1a.</i>			
<b>MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</b> 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 measures to avoid loss of individuals and maintain habitat function of occupied habitat.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>If species not listed under CESA or ESA are found, they will be protected under MM BIO-1b.</i>			
<b>MM BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants</b> 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. 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.  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.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<b>MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)</b>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>Avoidance measures will include using riparian and wet area buffers which will maintain habitat function for listed aquatic wildlife and wildlife that use riparian areas for travel corridors, nesting, breeding, and other life processes. Some wildlife have special survey protocols, such as the northern spotted owl (<i>Strix occidentalis caurina</i>) and the marbled murrelet (<i>Brachyramphus marmoratus</i>). These surveys will be carried out and appropriate buffers around occupied habitat will be applied to avoid mortality, injury, or disturbance and to maintain habitat function for listed or fully protected species and treatments will not occur within the buffer. Alternatively, treatments may be implemented outside of the sensitive period for that species to avoid mortality, injury, or disturbance and to maintain habitat function.</i>			

<p><b>MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</b> 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.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the 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. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> Prior-During</p>	<p><u>CAL FIRE</u></p>
<p><i>For special-status wildlife species not listed under CESA or ESA that were observed during reconnaissance surveys or focused or protocol-level surveys, the project proponent will avoid or minimize adverse effects to the species by implementing a no-disturbance buffer around occupied sites (for all treatment activities except prescribed burning). For prescribed burning, treatments will occur outside of the sensitive period for that species. Additionally, habitat function will be maintained by ensuring habitat features essential for survival for special status species (e.g., trees with complex structure, trees with nesting platforms, raptor rests, etc.) will be retained.</i></p>			
<p><b>MM BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</b> If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p> <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.</p>	<p>No</p>	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>
<p><b>MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)</b></p>	<p>No</p>	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>
<p><i>Valley Elderberry Longhorn Beetle is not found in the project area. It is endemic to riparian areas in the Sacramento and San Joaquin Valleys (Lang et. Al. 1989).</i></p>			
<p><b>MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)</b> 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 would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p>	<p>No</p>	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>

<i>No special status butterflies or obligate host species were documented during desk review or reconnaissance surveys for this project.</i>			
<b>MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)</b>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>No special status beetles, flies, grasshoppers, or snails were documented during desk review or reconnaissance surveys for this project.</i>			
<b>MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)</b> 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 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. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>There are two special-status bees that have potential to occur near the project area, Bombus crotchii and Bombus occidentalis occidentalis.</i>			
<i>Habitat requirements for Bombus crotchii are open grassland and scrub habitats while requirements for Bombus occidentalis occidentalis are meadows and grasslands with abundant floral resources (Hatfield et. Al. 2018). The project area is a closed-canopy forest with neither meadows, open grassland, nor scrub habitat contained within. One area of the project is adjacent to Bob Woods Meadow. The meadow will not be treated as part of this project and is not within the project boundaries.</i>			
<i>Thinning and burning forested areas adjacent to Bob Woods Meadow may increase bumble bee forage potential for bees occupying the adjacent meadow since flowering plants such as ceanothus have been observed revegetating under the forest canopy after mastication and broadcast burning of a nearby selection harvested THP.</i>			
<i>Herbicide application may be used on invasive plants by hand application. Broad application of herbicides can reduce floral resources (Hatfield et. Al. 2018) and is not proposed for this project. The aim of the herbicide treatment for this project is not to reduce floral resources but to promote native vegetation as the key floral resource which establishes after mechanical, manual, and prescribed burning treatments.</i>			
<i>No habitat required for special-status bees will be treated and floral resources adjacent to habitat will not be significantly impacted, therefore, MM BIO-2g does not apply.</i>			
<b>MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)</b>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<b>MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</b> 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:			
	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>

<p>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. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.</p>			
<p><i>The only Sensitive Natural Communities within the project area are Redwood Forest Alliance and Tanoak Forest Alliance (both S3).</i></p> <p><i>Membership rules for Redwood Forest Alliance state that there must be 50% relative cover in the Redwood tree canopy, or more than 30% relative cover with other conifers. Membership rules for the Tanoak Forest Alliance state that there must be 50% relative cover in the tanoak canopy and over 10% absolute cover in the tree layer.</i></p> <p><i>Neither one of these Sensitive Natural Communities will have their relative cover reduced through any of the treatment prescriptions proposed for the VTP.</i></p>			
<p><b>MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands.</b> If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><i>Sensitive natural communities or oak woodlands will not be converted or lost; therefore, MM BIO-3b does not apply to this project.</i></p>			
<p><b>MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</b> Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><i>Project treatments within riparian habitat will be of limited intensity and will not constitute a loss of habitat.</i></p>			
<p><b>MM BIO-4: Avoid State and Federally Protected Wetlands</b></p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>Wetland features will be identified and buffered for avoidance.</i></p>			
<p><b>MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</b></p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<p><i>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. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied.</i></p>			

Refer to Attachment B for guidance on the project-specific review and survey procedures for biological resources.

### Special-Status Plant and Wildlife Species<sup>1</sup> with High and Moderate Probability that may occur in the Treatment Areas

Species	Lifeform	CRPR <sup>2</sup> / Other Rank	State Listing Status	Federal Listing Status	Habitat	Micro Habitat	Potential Habitat <sup>3</sup>	Mitigation Measures if Found
<b>Special-Status Plants</b>								
<i>Astragalus agnicidus</i> Humboldt County milk-vetch	perennial herb	1B.1	CE	--	Broadleafed upland forest, North Coast coniferous forest		High	MM Bio-1a or MM Bio-1c
<i>Bryoria spiralis</i> twisted horsehair lichen	fruticose lichen	1B.2	--	--	Coastal dunes. North Coast coniferous forest (immediate coast)	Usually on conifers	Moderate	MM Bio-1b or MM Bio-1c
<i>Calamagrostis bolanderi</i> Bolander's reed grass	perennial rhizomatous herb	4.2	--	--	Bogs and fens, Broadleafed upland forest, Closed-cone coniferous forest, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest	Mesic.	High	MM Bio-1b or MM Bio-1c
<i>Calamagrostis foliosa</i> leafy reed grass	perennial herb	4.2	CR	--	Coastal bluff scrub   North coast coniferous forest	Rocky cliffs and ocean-facing bluffs.	Moderate	MM Bio-1a or MM Bio-1c
<i>Calcium adspersum</i> Spiral-spored guilded-head pin lichen	crustose lichen	2B.2		--	In the Pacific Northwest, all known occurrences are on trees older than 200 years	It usually occurs in relatively open stands in drier microhabitats where sheltered from precipitation, such as in crevices of bark, the dry side of leaning trunks, or the underside of limbs.	Moderate	MM Bio-1b or MM Bio-1c
<i>Campanula californica</i> swamp harebell	perennial rhizomatous herb	1B.2	--	--	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Marshes and swamps, Meadows and seeps, North Coast coniferous forest	Mesic.	High	MM Bio-1b or MM Bio-1c
<i>Cardamine angulata</i> seaside bittercress	perennial herb	2B.1	--	--	Lower montane coniferous forest   North coast coniferous forest   Wetland	Wet areas, streambanks.	Moderate	MM Bio-1b or MM Bio-1c
<i>Carex californica</i> California sedge	perennial rhizomatous herb	2B.2	--	--	Bogs and fens, Closed-cone coniferous forest, Coastal prairie, Marshes and swamps, Meadows and seeps		High	MM Bio-1b or MM Bio-1c
<i>Ceanothus gloriosus</i> var. <i>exaltatus</i> glory brush	perennial evergreen shrub	4.3	--	--	Chaparral		High	MM Bio-1b or MM Bio-1c
<i>Chrysosplenium glechomifolium</i> Pacific golden saxifrage	perennial herb	4.3	--	--	North Coast coniferous forest, Riparian forest	Roadsides (sometimes), Seeps (sometimes), Streambanks	Moderate	MM Bio-1b or MM Bio-1c
<i>Coptis laciniata</i> Oregon goldthread	perennial rhizomatous herb	4.2	--	--	Meadows and seeps, North Coast coniferous forest	Mesic.	High	MM Bio-1b or MM Bio-1c

<i>Cornus canadensis</i> bunchberry	perennial rhizomatous herb	2B.2	--	--	Bogs and fens, Meadows and seeps, North Coast coniferous forest		High	MM Bio-1b or MM Bio- 1c
<i>Cornus unalaschkensis</i> bunchberry	perennial herb	2B.2	--	--	Bogs and fens, Meadows and seeps, North Coast coniferous forest		High	MM Bio-1b or MM Bio- 1c
<i>Cypripedium montanum</i> mountain lady's-slipper	perennial rhizomatous herb	4.2	--	--	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest		High	MM Bio-1b or MM Bio- 1c
<i>Erythronium oregonum</i> giant fawn lily	perennial geophyte	2B.2	--	--	Cismontane woodland   Meadow & seep   Ultramafic	Openings. Sometimes on serpentine; rocky sites.	Moderate	MM Bio-1b or MM Bio- 1c
<i>Erythronium revolutum</i> coast fawn lily	perennial geophyte	2B.2	--	--	Bog & fen   Broadleaved upland forest   North coast coniferous forest   Wetland	Mesic sites; streambanks.	High	MM Bio-1b or MM Bio- 1c
<i>Fissidens pauperculus</i> minute pocket moss	moss	1B.2	--	--	North Coast coniferous forest		High	MM Bio-1b or MM Bio- 1c
<i>Glyceria grandis</i> American manna grass	perennial rhizomatous grass	2B.3	--	--	Bog & fen   Marsh & swamp   Meadow & seep   Wetland	Wet meadows, ditches, streams, and ponds, in valleys and lower elevations in the mountains.	High	MM Bio-1b or MM Bio- 1c
<i>Kopsiopsis hookeri</i> small groundcone	perennial geophyte	2B.3	--	--	North Coast coniferous forest	Parasitic on <i>Gaultheria shallon</i> and <i>Vaccinium</i> spp.	High	MM Bio-1b or MM Bio- 1c
<i>Lilium maritimum</i> coast lily	perennial geophyte	1B.1	--	--	Broadleaved upland forest, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Marshes and swamps, North Coast coniferous forest		High	MM Bio-1b or MM Bio- 1c
<i>Lilium rubescens</i> redwood lily	perennial geophyte	4.2	--	--	Broadleaved upland forest, Chaparral, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Roadsides (sometimes), Serpentinite (sometimes). Increasingly rare in southern portion of range.	High	MM Bio-1b or MM Bio- 1c
<i>Listera cordata</i> heart-leaved twayblade	perennial herb	4.2	--	--	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	Easily overlooked	High	MM Bio-1b or MM Bio- 1c
<i>Lycopodium clavatum</i> running-pine	perennial rhizomatous herb	4.1	--	--	Lower montane coniferous forest, Marshes and swamps, North Coast coniferous forest	Edges (often), Openings, Roadsides.	High	MM Bio-1b or MM Bio- 1c
<i>Mitellastra caulescens</i> leafy-stemmed mitrewort	perennial rhizomatous herb	4.2	--	--	Broadleaved upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Mesic, Roadsides (sometimes).	High	MM Bio-1b or MM Bio- 1c
<i>Monotropa uniflora</i> ghost-pipe	perennial geophyte	2B.2	--	--	Broadleaved upland forest   North coast coniferous forest	Often under redwoods or western hemlock.	Moderate	MM Bio-1b or MM Bio- 1c
<i>Packera bolanderi</i> var. <i>bolanderi</i> seacoast ragwort	perennial rhizomatous herb	2B.2	--	--	Coastal scrub, North Coast coniferous forest		High	MM Bio-1b or MM Bio- 1c

<i>Piperia candida</i> white-flowered rein orchid	perennial herb	1B.2	--	--	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest	Serpentine (sometimes)	High	MM Bio-1b or MM Bio-1c
<i>Pityopus californicus</i> California pinefoot	perennial herb	4.2	--	--	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest	Mesic.	High	MM Bio-1b or MM Bio-1c
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	perennial rhizomatous herb	1B.1	CT	--	Broadleafed upland forest, Meadows and seeps, North Coast coniferous forest	Mesic, Openings.	Moderate	MM Bio-1a or MM Bio-1c
<i>Pleuropogon refractus</i> noddling semaphore grass	perennial rhizomatous herb	4.2	--	--	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest	Mesic.	High	MM Bio-1b or MM Bio-1c
<i>Potamogeton epihydrus</i> Nuttall's ribbon-leaved pondweed	perennial herb	2B.2	--	--	Marsh & swamp   Wetland	Shallow water, ponds, lakes, streams, irrigation ditches.	Moderate	MM Bio-1b or MM Bio-1c
<i>Ramalina thrausta</i> angel's hair lichen	fruticose lichen	2B.1	--	--	North Coast coniferous forest	On dead twigs and other lichens.	High	MM Bio-1b or MM Bio-1c
<i>Ranunculus lobbii</i> Lobb's aquatic buttercup	perennial herb	4.2	--	--	Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, Vernal pools	Mesic sites.	Moderate	MM Bio-1b or MM Bio-1c
<i>Rhynchospora alba</i> white beaked-rush	perennial rhizomatous herb	2B.2	--	--	Bogs and fens, Marshes and swamps, Meadows and seeps		High	MM Bio-1b or MM Bio-1c
<i>Sanguisorba officinalis</i> great burnet	perennial rhizomatous herb	2B.2	--	--	Bogs and fens, Broadleafed upland forest, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Riparian forest		High	MM Bio-1b or MM Bio-1c
<i>Sidalcea malachroides</i> maple-leaved checkerbloom	perennial herb	4.2	--	--	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland	Disturbed areas (often).	High	MM Bio-1b or MM Bio-1c
<i>Thermopsis robusta</i> robust false lupine	perennial rhizomatous herb	1B.2	--	--	Broadleafed upland forest   North coast coniferous forest   Ultramafic	Ridgetops; sometimes on serpentine.	Moderate	MM Bio-1b or MM Bio-1c
<i>Tiarella trifoliata</i> var. <i>trifoliata</i> trifoliolate laceflower	perennial rhizomatous herb	3.2	--	--	Lower montane coniferous forest, North Coast coniferous forest	Edges, Streambanks	High	MM Bio-1b or MM Bio-1c
<i>Trichodon cylindricus</i> cylindrical trichodon	moss	2B.2	--	--	Broadleafed upland forest   Meadow & seep   Upper montane coniferous forest	Moss growing in openings on sandy or clay soils on roadsides, stream banks, trails or in fields.	Moderate	MM Bio-1b or MM Bio-1c
<i>Trifolium buckwestiorum</i> Santa Cruz clover	annual herb	1B.1	--	--	Broadleafed upland forest, Cismontane woodland, Coastal prairie	Gravelly	High	MM Bio-1b or MM Bio-1c
<i>Trifolium trichocalyx</i> Monterey clover	annual herb	1B.1	CE	FE	Closed-cone coniferous forest		High	MM Bio-1a or MM Bio-1c

<i>Triquetrella californica</i> coastal triquetrella	moss	1B.2	--	--	Coastal bluff scrub, Coastal scrub		High	--
<i>Usnea longissima</i> Methuselah's beard lichen	fruticose lichen	4.2	--	--	Broadleafed upland forest, North Coast coniferous forest		High	--
<i>Veratrum fimbriatum</i> fringed false-hellebore	perennial herb	4.3	--	--	Bogs and fens, Coastal scrub, Meadows and seeps, North Coast coniferous forest	Mesic	High	--
Special-Status Wildlife	Lifeform	CRPR <sup>2</sup> / Other Rank	State Listing Status	Federal Listing Status	Habitat	Micro Habitat	Potential Habitat?	Mitigation Measures if Found
<i>Actinemys marmorata</i> northwestern pond turtle	reptile	SC	--	--	North coast coniferous forest   Redwood   mixed conifer	Breeds in rivers and ponds; may be found in wintering in upland habitat below leaf litter.	Moderate	MM Bio-2b
<i>Antrozous pallidus</i> pallid bat	mammal/chiroptera	SC	--	--	north coast coniferous forest, oak woodland, coast redwood, grasslands	Roosts range from solitary to gregarious in caves, mines, crevices, basal hollows, underneath exfoliating bark.	High	MM Bio-2b
<i>Aquila chrysaetos</i> golden eagle	bird	WL/BFS	FP	--	North coast coniferous forest   Redwood   mixed conifer   oak woodland	Nests in large trees in broken habitats; cliff faces and steep rocky areas.	Moderate	MM Bio-2a
<i>Arborimus pomo</i> Sonoma tree vole	mammal/rodentia	SC	--	--	North coast coniferous forest   Oldgrowth   Redwood	Feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock or spruce.	High	MM Bio-2b
<i>Ardea alba</i> great egret	bird	BFS	--	--	North coast coniferous forest   Redwood	Communally nests in tall trees close to feeding areas.	Moderate	MM Bio-2b
<i>Ardea herodias</i> great blue heron	bird	BFS	--	--	North coast coniferous forest   Redwood	Communally nests in tall trees close to feeding areas.	Moderate	MM Bio-2b
<i>Ascaphus truei</i> coastal tailed frog	amphibian	SC	--	--	Aquatic   North coast coniferous forest   Redwood	Breeds in headwater streams with cobble substrates, cold and clear water	Moderate	MM Bio-2b
<i>Asio otus</i> long-eared owl	bird	SC	--	--	North coast coniferous forest   Redwood   Oak woodland   Savannah	Utilizes nests of corvids, hawks, squirrels, and woodrats, mistletoe brooms, and debris accumulations, and less so, on cliffs and tree cavities. May nests in forested areas adjacent to broken habitats and grasslands used for foraging.	High	MM Bio-2b
<i>Bassariscus astutus</i> ringtail	mammal/carnivora	--	FP	--	Riparian associate of North coast coniferous forest   Redwood   mixed conifer   oak woodland	Utilize cavities, rocky outcrops, abandoned rodent burrows, woodrate nests for resting and denning sites. Maternity season is April 15 - June 30.	High	MM Bio-2a

<i>Brachyramphus marmoratus</i> marbled murrelet	bird	--	CE	FT	Lower montane coniferous forest   Oldgrowth   Redwood	Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	High	MM Bio-2a
<i>Calileptoneta wapiti</i> Mendocino leptonetid spider	invertebrate	--	--	--	North coast coniferous forest	Known only from the type locality, Elk, and nearby sites in Mendocino County.	High	MM Bio-2b
<i>Chaetura vauxi</i> Vaux's swift	bird	SC	--	--	North coast coniferous forest   Redwood	Utilizes stovepipe cavity trees and basal hollows	High	MM Bio-2b
<i>Contopus cooperi</i> olive-sided flycatcher	bird	SC	--	--	North coast coniferous forest   Redwood   Coastal prairie and scrub	Utilized mature forests with broken habitat, edges, and openings.	High	MM Bio-2b
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	mammal/chiroptera	SC	--	--	Broadleaved upland forest   Chaparral   Chenopod scrub   Great Basin grassland   Great Basin scrub   Joshua tree woodland   Lower montane coniferous forest   Meadow & seep   Mojavean desert scrub   Riparian forest   Riparian woodland   Sonoran desert scrub   Sonoran thorn woodland   Upper montane coniferous forest   Valley & foothill grassland	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	High	MM Bio-2b
<i>Elanus leucurus</i> white-tailed kite	bird	FP	--	--	North coast coniferous forest   Redwood Mixed conifer   oak woodland savannah	Nests in forests or clumps of trees near foraging area in grasslands, coastal prairie and scrub; non-breeders may travel from foraging areas to communal roosts in interior forest habitat.	Moderate	MM Bio-2b
<i>Empidonax traillii brewsteri</i> least willow flycatcher	bird	--	CE	--	Riparian forests within coast redwood, north coast coniferous forest	nests in willow thickets along riparian corridors and flood plains	Moderate	MM Bio-2a
<i>Entosphenus tridentatus</i> Pacific lamprey	fish	SC	--	--	Aquatic   West Coast streams	Stream and river habitat; project outside of watercourse areas	High	MM Bio-2b
<i>Falco peregrinus anatus</i> peregrine falcon	bird	BFS	FP	Delisted	North coast coniferous forest   Redwood	Nests on rock faces, cliffs; known to utilize large old-growth trees with top cavities for nesting.	Moderate	MM Bio-2a
<i>Haliaeetus leucocephalus</i> bald eagle	bird	BFS	CE	Delisted	Lower montane coniferous forest   Oldgrowth	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Moderate	MM Bio-2a
<i>Helminthoglypta arrosa pamoensis</i> Pomo bronze shoulderband	invertebrate	SC	--	--	North coast coniferous forest   Redwood	Found under redwoods.	Moderate	MM Bio-2b

<i>Lasiurus blossevillii</i> western red bat	mammal/chiroptera	SC	--	--	Riparian forest	Roosts in and under foliage of trees and shrubs in riparian habitat.	High	MM Bio-2b
<i>Oncorhynchus kisutch</i> pop. 4 coho salmon - central California coast ESU	fish	--	CE	FE	Aquatic   Rivers and streams south of Punta Gorda, to and including Aptos Creek	Stream and river habitat; project on a ridgeline outside of watercourse areas	High	MM Bio-2a
<i>Oncorhynchus mykiss irideus</i> pop. 16 steelhead - northern California DPS	fish	--	--	FT	Aquatic   Sacramento/San Joaquin flowing waters	Stream and river habitat; project on a ridgeline outside of watercourse areas	High	MM Bio-2b
<i>Oncorhynchus tshawytscha</i> pop. 17 chinook salmon - California coastal ESU	fish	--	--	FT	Aquatic   Rivers and streams south of the Klamath River to the Russian River	Stream and river habitat; project on a ridgeline outside of watercourse areas	High	MM Bio-2b
<i>Pandion haliaetus</i> osprey	bird	BFS/WL	--	--	Riparian forest   North coast coniferous forest   Redwood	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	High	MM Bio-2b
<i>Pekania pennanti</i> fisher	mammal/carnivora	SC	--	--	North coast coniferous forest   Redwood   mixed conifer	Utilize cavities in trees and logs for material nesting; cavities, platforms, large lateral branches, existing nest structures or mistletoe brooms for resting.	Moderate	MM Bio-2b
<i>Progne subis</i> purple martin	bird	SC	--	--	Broadleaved upland forest   Lower montane coniferous forest   North coast coniferous forest   Redwood	Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag.	High	MM Bio-2b
<i>Rana aurora</i> northern red-legged frog	amphibian	SC	--	--	Klamath/North coast flowing waters   Riparian forest   Riparian woodland	Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	Moderate	MM Bio-2b
<i>Rana boylei</i> foothill yellow-legged frog	amphibian	SC	CE	--	Aquatic   Chaparral   Cismontane woodland   Coastal scrub   Klamath/North coast flowing waters   Lower montane coniferous forest   Meadow & seep   Riparian forest   Riparian woodland   Sacramento/San Joaquin flowing waters	Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Moderate	MM Bio-2a
<i>Rhyacotriton variegatus</i> southern torrent salamander	amphibian	SC	--	--	Aquatic   North coast coniferous forest   Redwood   mixed conifer	Found in seeps and headwater streams	Moderate	MM Bio-2b
<i>Setophaga petechia</i> yellow warbler	bird	SC	--	--	Riparian forest	Nests and forages in willow, wood rose, ash, alder and cottonwood in riparian zones.	Moderate	MM Bio-2b
<i>Strix occidentalis caurina</i> northern spotted owl	bird	--	CT	FT	North coast coniferous forest   Oldgrowth   Coast redwood   mixed conifer	High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space	High	MM Bio-2a

						under canopy. On industrial timberlands in Mendocino County, species found most frequently nesting in debris accumulations/stick nests of other species in coast redwood trees.		
<i>Taricha rivularis</i> red-bellied newt	amphibian	SC	--	--	Broadleaved upland forest   North coast coniferous forest   Redwood   Riparian forest   Riparian woodland	Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	High	MM Bio-2a

<sup>1</sup>October 2022 CNDDDB, CNPS, Fort Bragg, Elk, Albion, Sherwood Peak, Dutchmans Knoll, Inglenook, Comptche, Northspur, Albion, Navarro, Longvale, Greenough Ridge, Burbeck, Bailey Ridge and Navarro USGS 7.5' Quadrangle Maps, CAL VTP Scoping List and the NorCal VTP Northern California Coast Ranges (M261B) List and USFWS IPaC List

<sup>2</sup>CRPR = California Rare Plant Ranking

Other: WL = Watch List, BFS = Board of Forestry Sensitive

State: CE = California Endangered, CT = California Threatened, CR = California Rare, FP = Fully Protected, SC = Species of Special Concern

**Federal:** FE = Federally Endangered, FT = Federally Threatened

**None.** No habitat components meeting the species requirements are present (such as coastal marsh or coastal dunes).

**Unlikely.** Few to none of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. Habitat components include climate, soil and aspect. The species is not likely to be found on the site.

**Moderate.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. Habitat components include climate, soil and aspect. The species has a moderate probability of being found on the site.

**High.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

**Present.** Species is observed on the site or has been recorded (database observation) on the site in the recent past.

## EC-6: GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil</b>	Impact Geo-1, 3.7	LTS	<u>SPR GEO-1, 2, 3, 4, 5, 6, 7, 8,</u> <u>SPR HYD-3</u> <u>SPR AQ- 3</u> <u>SPR HYD- 4</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Initial treatment and maintenance treatments would include mechanical treatment, and prescribed broadcast burning. All these activities would result in vegetation removal and soil disturbance. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. This impact is within the scope of the PEIR because the use of and type of equipment, extent of vegetation removal, and intensity of prescribed burning is consistent with those analyzed 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, the soil characteristics of the project area are essentially the same within and outside the treatable landscape; therefore, the potential impact related to soil erosion is also the same, as described above. SPRs applicable to this treatment project are GEO-1 through GEO-8, AQ-3, and AQ-4.</p> <p>Both prescribed burning and mechanical operations have a potential to disturb soil and cause a loss in topsoil. Prescribed burning can remove litter and surface fuels. Removing this organic layer can expose mineral soil to rain splash and overland flow. However, in an area that is treated by prescribed burning, typically 70 percent of the vegetation remains which helps minimize erosion (CAL FIRE 2019). Additionally, vegetation usually regrows within a year (CAL FIRE 2019). Following a prescribed burn, CAL FIRE would also minimize erosion via the installation of waterbars (SPR GEO-5).</p> <p>Mechanical operations may also increase the risk of soil disturbance. This is due to compaction caused by mechanical equipment, loss of soil cover, and the churning and breakdown of soil structure by mechanical equipment. To address this risk, SPR GEO-1 will suspend mechanical soil disturbance during precipitation, SPR GEO-2 will limit high ground pressure vehicles, and SPR GEO-3 will stabilize mechanically disturbed soil areas.</p>						
<b>Impact GEO-2: Increase Risk of Landslide</b>	Impact Geo-2, 3.7	LTS	<u>SPR GEO-3, 4, 7, 8,</u> <u>SPR AQ- 3</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>A licensed geologist with California Geologic Survey (CGS) reviewed past geologic surveys and LiDAR maps for the Project area and conducted a field visit to clarify conditions through direct observation. CGS recommendations will be incorporated into the Project. See CGS review maps for map point locations.</p> <p><u>CGS General Recommendations:</u></p>						

<p>None. Based on our understanding of the project, the proposed operations appear appropriate provided that the Specific Recommendations included in this report are followed.</p> <p><u>CGS Specific Recommendations:</u></p> <p><u>Dunlap South 2010 THP; Map Point CGS-1:</u> None.</p> <p><u>Fairbanks THP, Map Point 11.</u> Utilize hand-constructed fire line rather than dozer line through this unstable area, as shown on Figure 3.</p> <p><u>Fairbanks THP, Area CGS-2.</u> Utilize hand-constructed fire line rather than dozer line through this unstable area, as shown on Figure 3.</p> <p><u>Cribwall #2 THP, Map Point S1.</u> None.</p> <p><u>Cribwall #2 THP, Map Point S10.</u> Maintain the EEZ surrounding this unstable area as shown on Figure 4.</p> <p><u>Bob Woods West THP, Map Point D4.</u> Maintain the EEZ surrounding the previously unmapped portion of landslide D4 within the mechanical vegetation treatment area as shown on Figure 5.</p> <p><u>Bob Woods West THP, Map Point CGS-3.</u> Avoid using or reconstructing this segment of Road 345B. Should it be determined that use of the road is needed, please contact CGS for consultation.</p> <p><u>Camp 8 #2 THP, Map Point LS-13b.</u> The dozer line within the earthflow complex shall be minimized to one blade width with minimal grading (i.e. cuts/fills).</p> <p><u>Camp 8 #2 THP, Map Point CGS-4.</u> None.</p> <p>SPRs applicable to this treatment project are GEO-1, GEO-3, GEO-4, GEO-5, GEO-7 and GEO-8. By incorporating CGS recommendations and applicable SPRs, the project will avoid significant impacts.</p>							
<p><b>Other Impacts to Geology, Soils, Paleontology, And Mineral Resources:</b> Would the project result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?</p>					No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR GEO-1 Suspend Disturbance during Heavy Precipitation:</b> 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. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<p><i>When mechanical or herbicide treatments are being implemented on this project, activities will be suspended if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours.</i></p>			

<p><b>SPR GEO-2 Limit High Ground Pressure Vehicles:</b> 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. This SPR applies only to mechanical treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<p><i>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.</i></p>			
<p><b>SPR GEO-3 Stabilize Disturbed Soil Areas:</b> 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. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<p><i>It is not anticipated that any of the project treatments will result in bare soil over 50% of the project. Bare soil will generally be limited to isolated disturbance where tracked equipment makes turns. In the unlikely event that an area crosses the 50% threshold, disturbed soils that result in exposure of bare soils over 50 percent or more in the treatment area with mulch or equivalent immediately after treatment activities will be stabilized, to the maximum extent practicable, to minimize the potential for substantial sediment discharge.</i></p>			
<p><b>SPR GEO-4 Erosion Monitoring:</b> The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> During-Post	<u>CAL FIRE</u>
<p><i>Treatment areas will be inspected for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. Additionally, after the first storm event where 1.5 inches of rain or more fell within a 24-hour period the project area will be inspected to determine if water breaks functioned properly. If any area is identified where erosion could result in substantial discharge the area will be immediately corrected and stabilized. The rainy period for this project area is November 1 through April 1.</i></p>			
<p><b>SPR GEO-5 Drain Stormwater via Water Breaks:</b> 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. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> During-Post	<u>CAL FIRE</u>
<p><b>SPR GEO-6 Minimize Burn Pile Size:</b> 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. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types.</p>	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>

<b>SPR GEO-7 Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads.</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<b>SPR GEO-8 Steep Slopes:</b> 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). This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>

## EC-7: GREENHOUSE GAS EMISSIONS

	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact GHG-1:</b> Conflict with applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs	Impact GHG-1, 3.8	LTS	<u>SPR GHG- 1</u>	Yes	LTS	<input checked="" type="checkbox"/>
Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. Consistent with the PEIR, although GHG emissions would occur from equipment and vehicles used to implement treatments and from broadcast burning, the purpose of the proposed project is to reduce wildfire risk, which would reduce GHG emissions and increase carbon sequestration over the long term. The Jackson Demonstration State Forest Management Plan (2016) calls for exploration of research and demonstration projects aimed at the mitigation of greenhouse gas effects through carbon sequestration. This CalVTP project is part of a greenhouse gas and fire fuels mitigation study that aims to make redwood forests more resilient to wildfire and therefore able to sequester more carbon in the long-term, though there will be short-term carbon emissions due to treatments.						
<b>Impact GHG-2:</b> Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, 3.8	PSU	<u>SPR AQ- 3</u> <u>MM GHG- 2</u>	Yes	PSU	<input checked="" type="checkbox"/>
Use of vehicles/equipment and prescribed burning during treatment activities will result in greenhouse gas (GHG) emissions. Greenhouse gases contribute to climate change and include carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (NO <sub>2</sub> ), and others. CO <sub>2</sub> will be the primary GHG emitted during the treatment activities. Strategies to mitigate climate change center on reducing the net GHG emissions. This includes reducing emissions as well as increasing carbon stored in natural systems and stabilizing the storage of carbon over long periods of time. This project will have short-term increases in GHG emissions that will result in more stable						

storage of carbon within the forest biomass over a long period of time by reducing the risk of catastrophic wildfires and creating fire-adapted ecosystems more resilient to fire.

Estimations of GHG emissions were calculated for equipment/vehicle use (see GHG Calculations attachment). For heavy equipment and transport, wildland engines, and pickups, the CO<sub>2</sub> equivalent was 69.5 metric tons.

Estimations of GHG emissions were calculated for broadcast burning treatments using First Order Fire Effects Model (FOFEM) (see GHG Calculations attachment). A range of forest cover types were analyzed, including Redwood/tanoak, Douglas-fir/tanoak/madrone/bay laurel, Douglas-fir/white fir, redwood, and Douglas-fir/tanoak/Pacific madrone. Inputs were modified to reflect conditions more accurately in Jackson Demonstration State Forest when data was available to supplement the cover type default values. Otherwise, input defaults were used for the cover types. For the range of cover types modelled, the total CO<sub>2</sub> emissions ranged from 6,900 metric tons for Doug-fir, Tanoak, Madrone, CA bay laurel forest type to 16,000 metric tons for Redwood-tanoak cover type modelled over the 282 acres to be broadcast burned. The estimated metric tons of CO<sub>2</sub> per acre for the various cover types are shown below.

The cover types within the project area range from redwood dominated forests to Douglas-fir dominated forests, both often including a major tanoak component and minor components of grand fir, western hemlock, madrone, bay laurel, or chinquapin. The total is estimated to be below 16,000 metric tons, but not less than 6,900 metric tons, given the range of cover types. The overall CO<sub>2</sub> emissions estimate is likely closer to the higher end of the range, given the dominance of redwood forest cover types in the project area. A conservative CO<sub>2</sub> emission estimate of 16,000 metric tons would be appropriate, given the dominant tree species within the project.

Cover type	CO <sub>2</sub> (metric ton/ac)	CO <sub>2</sub> total for 282 acres (metric ton)
Redwood-Tanoak	57	16,000
DF/TO/Madrone/Bay	25	6,900
DF/WF	32	9,000
SAF Redwood	54	15,000
SAF DF/TO/PM	42	12,000

The Ecological Restoration treatment type for this VTP is designed to reduce GHG and fire fuels. This, in turn, reduces the potential for catastrophic wildfires, restores ecology that was historically fire-adapted, puts fire back on the landscape where it was historically present at around 6-to-20-year intervals (Brown and Baxter, 2003), and creates a more stable natural carbon storage. Therefore, the benefits to net GHG emissions resulting from the project outweigh the short-term carbon emissions.

GHG generation was examined in the PEIR. These impacts associated with this project are within the scope of the PEIR because the treatment activities, types of equipment, and duration of use are the same as those analyzed in the PEIR. Mitigation Measure GHG-2 would be implemented and would reduce GHG emissions associated with the prescribed burning. However, emissions generated by the treatment would still contribute to the annual emissions generated by the CalVTP, and this impact would remain significant and unavoidable, consistent with, and for the same reasons described in, the PEIR. SPR AQ-3 is also applicable to this treatment and will contain the description of feasible GHG reduction techniques implemented per Mitigation Measure GHG-2.

<p><b>Other Impacts to related to Greenhouse Gases:</b> Would the project result in other impacts related to greenhouse gases that are not evaluated in the CalVTP PEIR?</p>				No	N/A	☒
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	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process:</b> The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<p><b>MM GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns.</b> 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.</p>	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>

## EC-8: Energy

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy</b></p>	Impact ENG-1, 3.9	LTS	N/A	Yes	LTS	☒

Use of vehicles and mechanical equipment during initial treatment and treatment maintenance activities would result in the consumption of energy through the use of fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the PEIR. The consumption of energy during implementation of the treatment project 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. No SPRs are applicable to this impact.						
<b>Other Impacts to Energy Resources:</b> Would the project result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>

## EC-9: HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact HAZ-1:</b> Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, 3.10	LTS	<u>SPR HAZ- 1</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>The proposed project includes manual, mechanical, herbicide, and prescribed broadcast burning treatments. These activities would require the transportation, use, and storage of petroleum products (fuels, oils, and lubricants) and herbicides. These products are known hazardous materials that can cause significant health hazards.</p> <p>The potential for treatment activities that involve hazardous materials that can cause significant health hazards was examined in the PEIR. The project proponent would apply SPR-HAZ 1 to minimize leaks and the risk of resultant contaminants entering the environment. HAZ-1 requires maintenance of all diesel- and gasoline-powered equipment to the manufacturer’s specification. Accelerants would be used to implement prescribed burns; however, fire ignition (including use of accelerants) would not occur in the protection zones for watercourses (SPR HYD-4); therefore, water quality would not be affected. SPRs applicable to Impact HAZ-1 are SPR HAZ-1 and SPR HYD-4.</p>						
<b>Impact HAZ-2:</b> Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, 3.10	LTS	<u>SPR HAZ- 5, 6, 7, 8, 9</u>	Yes	LTS	<input checked="" type="checkbox"/>
Herbicide applications on JDSF comply with all California Department of Pesticide Regulation (CDPR) regulatory, training, and reporting requirements. A Registered Professional Forester, Qualified Applicator License holder, or Pest Control Advisor administers all applications on JDSF. Herbicide application prescriptions are developed by a licensed Pest Control Advisor (PCA). The PCA recommendation contains information on the timing, site conditions, and application method for the specific herbicide formulation.						

The use of herbicides for the control of invasive plant species was evaluated under the JDSF Environmental Impact Report (EIR) for the JDSF Forest Management Plan (FMP). The JDSF EIR evaluates the use of herbicides formulations with the following active ingredients: Glyphosate, Triclopyr, Imazapyr, Clopyralid, and Sulfometuron Methyl. These active ingredients were also evaluated under the PEIR for the Cal VTP program. For applications associated with this project glyphosate and triclopyr would be the most likely active ingredient in a prescribed herbicide formulation.

From Appendix HAZ-1 of the CalVTP PEIR:

- Glyphosate is listed as having an overall low toxicity to humans. Skin and eye irritation is possible. It is a possible endocrine disruptor.
- Triclopyr has an overall low toxicity. Toxicity is moderate if ingested. It is slightly toxic through acute oral, dermal, and inhalation routes.
- Imazapyr has an overall low toxicity. It is slightly toxic via acute oral, dermal, and inhalation routes.
- Clopyralid has a very low toxicity if ingested.
- Sulfometuron Methyl has a low toxicity via oral, dermal, and inhalation routes.

All of the above were found not likely to be carcinogenic, not carcinogenic, or having no evidence of being carcinogenic. Similarly, birth defects in animal studies were found at only very high concentrations for some of the above herbicides.

JDSF has an existing Integrated Vegetation Management program to control roadside invasive species and “disturbance follower” plant species that regenerate after timber harvests, road work, and other soil disturbing projects. Any herbicide application under this project will be conducted in the context of that existing program. All herbicide applications will be conducted consistent with the requirements of the JDSF FMP and EIR.

Through the compliance with existing regulatory programs, the JDSF Forest Management Plan, and CalVTP SPR HAZ-5-9 this project will avoid significant health hazards.

<b>Impact HAZ-3:</b> Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, 3.10	LTS	<u>MM HAZ- 3</u>	No	N/A	<input checked="" type="checkbox"/>
<b>Other Impacts to Hazardous Materials, Public Health and Safety:</b> Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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<b>SPR HAZ-1 Maintain All Equipment:</b> 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. This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<b>SPR HAZ-2 Require Spark Arrestors:</b> This SPR applies only to manual treatment activities and all treatment types	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<b>SPR HAZ-3 Require Fire Extinguishers:</b> 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.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<b>SPR HAZ-4 Prohibit Smoking in Vegetated Areas.</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<b>SPR HAZ-5 Spill Prevention and Response Plan:</b> 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. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>A SPRP will be prepared prior to beginning any herbicide treatment.</i>			
<b>SPR HAZ-6 Comply with Herbicide Application Regulations.</b> This SPR applies only to herbicide treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>The project proponent will comply with all herbicide application regulations as well as the herbicide application policies in the JDSF Management Plan.</i>			
<b>SPR HAZ-7 Triple Rinse Herbicide Containers.</b> This SPR applies only to herbicide treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During-Post	<u>CAL FIRE</u>
<i>Containers will be rinsed according to SPR HAZ-7.</i>			
<b>SPR HAZ-8 Minimize Herbicide Drift to Public Areas.</b> This SPR applies only to herbicide treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>

<i>Weather conditions will be monitored. Herbicide application will not occur in winds over 7 mph or if weather conditions exceed label specifications. Spray nozzles will be configured according to SPR HAZ-8.</i>			
<b>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas.</b> This SPR applies only to herbicide treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>Signs will be posted according to SPR HAZ-9 for herbicide treatments within 500 feet of public areas.</i>			
<b>MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites</b> 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.	Yes	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>All land within the project area is state-owned land. No known hazardous waste sites exist in the project area.</i>			

## EC-10: HYDROLOGY AND WATER QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>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</b>	Impact HYD-1, 3.11	LTS	<u>SPR HYD- 4</u> <u>SPR AQ- 3</u> <u>SPR BIO- 4, 5</u> <u>SPR GEO-4, 6</u> <u>MM BIO- 3b</u>	Yes	LTS	<input checked="" type="checkbox"/>
Initial and maintenance treatments would include prescribed burning. Runoff into adjacent drainages will be prevented by implementation of a buffer per SPR HYD-4. Although most treatment areas have been designed to avoid streams and watercourses, WLPZs ranging from 50 to 150 feet will be implemented for Class I and Class II streams that are within treatment areas pursuant to SPR HYD-4. The potential for prescribed burning activities to cause runoff and violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the use of low-intensity prescribed burns and associated impacts to water quality are consistent with those analyzed 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 project area, the surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from prescribed burning is also the same, as described above. SPRs applicable to Impact HYD-1 are HYD-1, HYD-4, AQ-3, BIO-4, GEO-4 and GEO-5.						

<b>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</b>	Impact HYD-2, 3.11	LTS	<u>SPR HYD-</u> 1, 4, 5 <u>SPR BIO-</u> 1 <u>SPR GEO-</u> 1, 2, 3, 4, 7, 8 <u>SPR HAZ-</u> 1, 5	Yes	LTS	☒
<p>Initial treatment would include mechanical and manual treatments. Although most treatment areas have been designed to avoid streams and watercourses, WLPZs ranging from 50 to 150 feet will be implemented for any watercourses that are within treatment areas pursuant to SPR HYD-4. Additionally, SPR BIO-1 requires that a qualified RPF or biologist identify sensitive habitats such as wetlands, wet meadows, or riparian areas as well as a suitable buffer area for avoidance during project activities. This buffer would act as a filter to slow runoff from adjacent treatment areas, allow infiltration of stormwater, and trap sediment that could otherwise be carried into surface waters. SPR GEO-1 and SPR GEO-2 limit ground disturbance during precipitation or heavy equipment operation over saturated soils, when such activity could produce ruts where runoff could concentrate. Equipment operation would be limited on steep or unstable slopes (SPR GEO-7 and SPR GEO-8) to reduce the potential for erosion. Additionally, highly disturbed areas would be stabilized with mulch (SPR GEO-3) and treatment areas would be inspected for erosion and remediated prior to the rainy season and following the first large storm or rainfall event (SPR GEO-4). The equipment used for mechanical vegetation removal treatments require the use of fuels and lubricants. Qualifying treatments implemented under the CalVTP would control the potential risks of spills and leaks through application of SPR HAZ-1, which requires that all equipment be maintained and regularly inspected for leaks. Implementation of SPR HAZ-1 would prevent spills of fuels and lubricants onto soils that could be carried by runoff into adjacent waterbodies. The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the use of heavy equipment and hand-held tools to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR. SPRs applicable to Impact HYD-2 are HYD-1, HYD-2, and HYD-4, GEO-1 through GEO-5, GEO-7, GEO-8, BIO-1, HAZ-1, and HAZ-5.</p>						
<b>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</b>	Impact HYD-3, 3.11	LTS	<u>SPR HYD-</u> 3	No	N/A	☒
<b>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</b>	Impact HYD-4, 3.11	LTS	<u>SPR HYD-</u> 5 <u>SPR BIO-</u> 4 <u>SPR HAZ-</u> 5, 7	Yes	LTS	☒
<p>Herbicide treatments are proposed for this project only if necessary to control invasive weeds following the manual, mechanical, or prescribed burning treatments. Application of herbicides will conform to the SPRs listed above. Herbicide application recommendations will be prepared by a licensed Pest Control Advisor, which will contain formulation specific recommendations for the protection of water quality. They will also comply with any other applicable regulations and will be in conformance with the JDSF Management Plan.</p> <p>Herbicide treatments have a potential to affect surface water through off-site movement of herbicides from runoff, leaching, drift, and misapplication or spills. Herbicide treatments also have the potential to affect ground water through leaching. SPR HYD-5 prohibits herbicide application during precipitation or if precipitation is forecast 24 hours before or after project activities. SPR HYD-5 prohibits spray applications of herbicides when wind speeds are 7 miles per hour or greater and</p>						

<p>prohibits herbicide application within 50 feet of surface water or wet meadows for non-aquatic formulations. Some formulations may require longer precipitation-free windows, as required by the label, which would be adhered to by applicators. Additionally, SPR HYD-5 prohibits non-aquatic herbicide formulations from being applied within 50 feet of a waterbody, riparian area, or wetland and prohibits the use of all herbicides within WLPZs without notification to the applicable regional water quality control board. These precautions would avoid and minimize the potential for herbicides to leach into groundwater or contaminate stormwater runoff.</p> <p>SPRs BIO-4 and HYD-5 allow only hand application of herbicides in riparian areas. The project proponent will allow only hand application for all herbicide applications, including in areas outside of riparian areas. These protections along with compliance with label requirements would avoid and minimize the potential for spray drift from herbicides to impact water quality.</p> <p>SPR HAZ-5 requires that all projects implemented through the proposed program develop a Spill Prevention and Response Plan and that projects maintain an onsite spill kit throughout the life of the activity. SPR HAZ-7 also includes requirements for rinsing and disposal of herbicide containers and requires that equipment and personnel washing occur in a manner that protects water resources. These protections would avoid and minimize the potential for misapplication or spills of herbicides to adversely affect water quality.</p>						
<p><b>Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area</b></p>	<p>Impact HYD-5, 3.11</p>	<p>LTS</p>	<p><u>SPR HYD-4, 6</u> <u>SPR GEO- 5</u></p>	<p>Yes</p>	<p>LTS</p>	<p><input checked="" type="checkbox"/></p>
<p>Initial and maintenance treatments have the potential to cause ground disturbance and erosion, which could directly or indirectly modify existing drainage patterns. However, implementation of SPR HYD-6 requires avoiding disturbance of existing drainage systems and maintaining pre-treatment drainage conditions. The potential for treatment activities to substantially alter the existing drainage pattern of a project site was examined in the PEIR. This impact to site drainage is within the scope of the PEIR because the types of treatments and treatment intensity are consistent with those analyzed in the PEIR. SPRs applicable to Impact HYD-5 are HYD-4, HYD-6, GEO-1, GEO-2, and GEO-5.</p>						
<p><b>Other Impacts to Hydrology and Water Quality: Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?</b></p>				<p>No</p>	<p>N/A</p>	<p><input checked="" type="checkbox"/></p>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<p><b>SPR HYD-1 Comply with Water Quality Regulations:</b> 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. This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> During-Post</p>	<p><u>CAL FIRE</u></p>

<b>SPR HYD-2 Avoid Construction of New Roads:</b> 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.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<i>The project proponent is not planning to construct new roads as part of this project.</i>			
<b>SPR HYD-3 Water Quality Protections for Prescribed Herbivory:</b> This SPR applies to prescribed herbivory treatment activities and all treatment types.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>
<b>SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:</b> The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916 .5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>SPR HYD-4 will be implemented to protect watercourses or wet areas.</i>			
<b>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:</b> This SPR applies to herbicide treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>The project proponent will adhere to SPR HYD-5 for locating herbicide mixing sites, use of herbicides in riparian habitats, herbicide use in habitats suitable for special-status species, buffers around ESA or CESA listed plants, and weather parameters suitable for herbicide application.</i>			
<b>SPR HYD-6 Protect Existing Drainage Systems:</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> Prior-During	<u>CAL FIRE</u>
<i>All existing drainage systems adjacent to roadways will be protected during project activities.</i>			

## EC-11: LAND USE AND PLANNING, POPULATION AND HOUSING

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact LU-1:</b> Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	Impact LU-1, 3.12	LTS	<u>SPR AD-3, 9</u>	Yes	LTS	<input checked="" type="checkbox"/>

Project treatments will occur on Jackson Demonstration State Forest (JDSF) – state owned land. The mission of JDSF is to “conduct innovative demonstrations, experiments, and education in forest management. The project is consistent with the mission of JDSF and aligns with the current Forest Management Plan.						
<b>Impact LU-2: Induce Substantial Unplanned Population Growth</b>	Impact LU-2, 3.12	LTS	N/A	Yes	LTS	<input checked="" type="checkbox"/>
Treatments will occur on a day-to-day operational period. Short-term increase in personnel will be experienced during project implementation. Any influx of personnel due to project implementation will likely be less than one 24-hour period and will not result in a significant impact to population growth.						
<b>Other Impacts related to Land Use and Planning, Population and Housing:</b> Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>

## EC-12: NOISE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation</b>	Impact NOI-1, 3.13	LTS	SPR NOI- 1, 2, 3, 4, 5, 6 SPR AD- 3	Yes	LTS	<input checked="" type="checkbox"/>
Initial and maintenance treatments would require heavy, noise-generating equipment. The potential for a substantial short-term increase in ambient noise levels from use of heavy equipment was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed, and the duration of equipment use, are consistent with those analyzed in the PEIR. While there is the potential for some prescribed broadcast burning to occur during nighttime and weekend hours, all treatment activities using equipment would be limited to daytime hours Monday through Friday, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. In addition, most proposed treatment areas are outside of sensitive noise-receptor areas (Fairbanks Drive is the sole proposed treatment area that is located adjacent to rural residents and the use of SPR NOI-4 to locate staging areas away from noise receptive areas would help lessen noise impacts near the rural residential area). In addition, SPR AD-3 would require that the project proponent design and implement the treatment in a manner that is applicable to the JDSF Management Plan to the extent the project is subject to them. SPRs that are applicable to Impact NOI-1 are SPRs NOI 1-6 and SPR AD-3.						
<b>Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL’s During Treatment Activities</b>	Impact NOI-2, 3.13	LTS	SPR NOI- 1	Yes	LTS	<input checked="" type="checkbox"/>

Initial and maintenance treatments would involve large trucks hauling heavy equipment to the project area. These haul truck trips would be dispersed on area roadways providing access to the six proposed treatment areas including State Route 20 and State Route 1. Vehicle traffic on area highways is not expected to generate a noticeable increase in traffic-related noise. Haul truck trips on the local roadways would pass by residential receptors and the event of each truck passing by could increase the single event noise levels. A significant portion of the land served by highway routes mentioned above are zoned for timber production and frequently used as haul routes for logging trucks and the transportation of heavy equipment such as that which is proposed for mechanical treatment of the proposed treatment areas. In addition, it is common to see forestry work crews being transported on all these aforementioned highway routes for miscellaneous forestry work including manual and prescribed burning. Each site is a former timber harvest area which sustained log truck traffic during its operational period.

The potential for a substantial short-term increase in single-event noise levels was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. SPR NOI-1 would limit the haul trips associated with the treatment to daytime hours, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours.

<b>Other Impacts Related to Noise:</b> Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>
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	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:</b> 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 restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<b>SPR NOI-2 Equipment Maintenance:</b> 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.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>As per SPR NOI-2, all equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.</i>			
<b>SPR NOI-3 Engine Shroud Closure:</b> 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.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>The project proponent will require that engine shrouds be closed during equipment operation.</i>			

<b>SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses.</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>Staging areas will be located away from noise-sensitive land uses.</i>			
<b>SPR NOI-5 Restrict Equipment Idle Time:</b> 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.	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<i>All motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes.</i>			
<b>SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:</b> 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. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<i>The Fairbanks site has noise-sensitive receptors within 1500' of the mastication units. All residents within 1500' have been notified.</i>			

## EC-13: RECREATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas</b>	Impact REC-1, 3.14	LTS	<u>SPR REC- 1</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Jackson Demonstration State Forest is open for public recreation. Public road access is limited to the proposed treatment areas Fairbanks Drive and Top of Hare on County Roads 409 and 408. Forest road access is controlled on the remaining proposed treatment areas (Dunlap South, Cribwall #2, Bob Woods West and Camp 8 #2). Public access is only available on foot, by bicycle or by horse. There are multiple hiking trails located adjacent and within the proposed treatment areas including Bob Woods Trail and Trestle Trail near proposed treatment area Bob Woods West, Brandon Gulch Trail and Camp 4 Loop near Camp 8 #2 proposed treatment area, and Wagon Trail in proposed treatment area, Cribwall. No developed recreation sites occur within the proposed treatment areas. Dunlap Campground area is located approximately ½ mile away from the Dunlap South proposed treatment area; Camp 8, Camp 4, Poison Oak, and Camp 3 Campgrounds are located near Camp 8 #2 proposed treatment area and Wagon and Tin Can Campgrounds are located near Cribwall #2 proposed treatment areas.</p> <p>The project proponent would apply SPR REC-1, which would notify users of temporary closures during treatment. If the temporary closure of a recreation area or facility is required, the proponent will post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. In addition, SPR AD-3</p>						

<p>would require that the project proponent design and implement the treatment in a manner that is applicable to the JDSF Management Plan to the extent the project is subject to them. SPR AD-6 would require, one to three days prior to the commencement of a treatment activity, the project proponent post signs in a conspicuous location near 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 concerns. SPR AD-4 would require, at least 3 days prior to the commencement of prescribed burning operations, the project proponent to: 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.</p>						
<p><b>Other Impacts to Recreation:</b> Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?</p>				No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR REC-1 Notify Recreational Users of Temporary Closures.</b> 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 approximately 2 weeks prior to the commencement of the treatment activities. This SPR applies to all treatment activities and treatment types.</p>	Yes	CAL FIRE Prior-During	CAL FIRE

## EC-14: TRANSPORTATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>Impact TRAN-1:</b> Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures</p>	Impact TRAN-1, 3.15	LTS	SPR TRAN- 1 SPR AD- 3	Yes	LTS	<input checked="" type="checkbox"/>

<p>Treatments will temporarily increase vehicular traffic along County Roads 408 and 409. The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR. SPR AD-3 would require that the project proponent design and implement the treatment in a manner that is applicable to the JDSF Management Plan to the extent the project is subject to it. SPR TRAN-1 would implement traffic control during treatments. The proposed treatment project would be short-term, and temporary increases in traffic related to treatments are within the scope of the activities and impacts addressed in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis</p>						
<p><b>Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses</b></p>	<p>Impact TRAN-2, 3.15</p>	<p>LTS</p>	<p><u>SPR TRAN- 1</u> <u>SPR AD-3</u></p>	<p>Yes</p>	<p>LTS</p>	<p><input checked="" type="checkbox"/></p>
<p>There is the potential for treatments to substantially increase hazards due to a design feature or incompatible use. This potential would not come from any construction or alteration of roadways but from smoke generated during burning operations that could potentially affect visibility along roadways for short periods of time. SPR TRAN-1 would implement traffic control during treatments. SPRs AD-4 and AD-6 would require public notification of treatments. The impact is within the scope of the PEIR analysis and site-specific analysis.</p>						
<p><b>Impact TRAN-3: Result in a net increase in VMT for the proposed CalVTP</b></p>	<p>Impact TRAN-3, 3.15</p>	<p>PSU</p>	<p><u>MM AQ- 1</u></p>	<p>Yes</p>	<p>LTS</p>	<p><input checked="" type="checkbox"/></p>
<p>Treatments could temporarily increase vehicle miles travelled for a short period as equipment enters the project location. It is not likely that traffic will increase beyond what is normal for the local area. SPRs AD-4 and AD-6 would require public notification of treatments and thus provide local commuters or others that could be affected by the increase in traffic the opportunity to change their schedule during treatment activities. This impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP could result in a net increase in VMT. The impact is within the scope of the PEIR analysis and site-specific analysis.</p>						
<p><b>Other Impacts to Transportation:</b> Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?</p>				<p>No</p>	<p>N/A</p>	<p><input checked="" type="checkbox"/></p>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR TRAN-1 Implement Traffic Control during Treatments:</b> 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. This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> During</p>	<p><u>CAL FIRE</u></p>

## EC-15: PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs</b>	Impact UTL-1, 3.16	LTS	N/A	Yes	LTS	<input checked="" type="checkbox"/>
Initial and maintenance treatments would include prescribed burning, which will require a water supply. Water tenders or wildland engines will be present during the prescribed burn. Water may be supplied from on-site sources, such as from property wells, or from out of the area. If water is supplied from sources that draw from ponds which are hydrologically connected to watercourses, the project proponent would be responsible for obtaining a Lake and Streambed Alteration permit from CDFW. CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. Fish and Game Code Section 1602 states that an entity must notify CDFW prior to substantially diverting or obstructing the natural flow of, or substantially changing or using any material from the bed, channel, or bank of, any river, stream, or lake, or depositing or disposing of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If CDFW determines that project activities will substantially divert from a river, stream, or lake, CDFW will issue a Lake or Streambed Alteration Agreement for that activity, that includes reasonable measures necessary to protect the resource, and the entity must conduct the activity in accordance with the Agreement.						
<b>Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity</b>	Impact UTL-2, 3.16	PSU	<u>SPR UTIL- 1</u>	No	N/A	<input checked="" type="checkbox"/>
The goal of this Project is to study the effect of prescribed fire versus no prescribed fire on different forest fuel treatments. Before the prescribed fire, fuels will be treated mechanically (masticator), manually (lop and scatter) or not treated at all. The manual and mechanical treatments will reduce fuels and not generate any solid waste. Masticated and manually treated materials will remain on-site. This impact does not apply to the proposed project.						
<b>Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste</b>	Impact UTL-3, 3.16	LTS	<u>SPR UTIL- 1</u>	No	N/A	<input checked="" type="checkbox"/>
This impact does not apply to the proposed project, because biomass generated from the proposed treatments would be treated on-site and if not treated, not-removed as per the Project goals.						
<b>Other Impacts to Public Services, Utilities, and Service Systems:</b> Would the project result in other impacts to public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?				No	N/A	<input checked="" type="checkbox"/>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR UTIL-1: Solid Organic Waste Disposition Plan.</b> 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. This SPR applies only to mechanical and manual treatment activities and all treatment types.	No	<u>CAL FIRE</u> N/A	<u>CAL FIRE</u>

## EC-16: WILDFIRE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire</b>	Impact WIL-1, 3-17	LTS	SPR <u>HAZ-2, 3, 4</u>	Yes	LTS	<input checked="" type="checkbox"/>
<p>Vegetation treatment activities proposed would include mechanical, manual, herbicide, and prescribed burn treatments. Vegetation treatment involving motorized equipment could pose a risk of accidental ignition. Temporary increases in risk associated with uncontrolled fire from prescribed burnings could also occur. As discussed in Section 3.17.1, "Environmental Setting," in Volume II of the Final PEIR, under "Prescribed Burn Planning and Implementation," implementing a prescribed burn requires extensive planning, including the preparation of prescription burn plans, smoke management plans, site-specific weather forecasting, public notifications, safety considerations, and ultimately favorable weather conditions so a burn can occur on a given day. Prior to implementing a prescribed burn, fire containment lines would be established by clearing vegetation surrounding the designated burn area to help prevent the accidental escape of fire. Water containers and safety equipment would be staged on site as necessary.</p> <p>The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR. Increased wildfire risk associated with the use of heavy equipment in vegetated areas and with prescribed burns is within the scope of the PEIR because the types of equipment and treatment duration and the types of prescribed burn methods proposed as part of the project are consistent with those analyzed 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 project area, the wildfire risk of the project area is essentially the same within and outside the treatable landscape; therefore, the wildfire impact is also the same, as described above. SPRs HAZ-1, HAZ-2, HAZ-3, and HAZ-4, pertaining to preparation of burn plans in accordance with CAL FIRE requirements, equipment safety requirements, keeping fire extinguishers, and prohibiting smoking in vegetated areas, apply to the proposed treatments. SPR AQ-3 is also applicable to this as it requires a burn plan prepared by a qualified technician or certified State Burn Boss and will predict fire behavior. SPRs applicable to Impact WIL-1 are SPRs AQ-3 and HAZ-2, 3 and 4.</p>						
<b>Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides</b>	Impact WIL-2, 3-17	LTS	SPR <u>AQ-3</u> SPR <u>GEO-3, 4, 5, 8</u>	No	LTS	<input checked="" type="checkbox"/>

<p>Initial treatment and treatment maintenance would include prescribed burning. Some steep slopes exist within the treatment areas. Although most mechanical treatment would occur from existing roads or skid trails or on flat to moderate slopes, SPR GEO-8 would apply if a treatment area contains steep slopes (greater than 50%). Furthermore, because the treatments reduce wildfire risk, they would also decrease post wildfire landslide and flooding risk in areas that could otherwise burn in a high-severity wildfire without treatment. The only site with nearby neighbors is at Fairbanks. Slopes at Fairbanks are gentle, and the community is upslope of the project area. Runoff from Fairbanks drains away from neighboring properties into tributaries of the main stem of Caspar creek. The area was reviewed by CGS and equipment exclusion zones were created along the planned fire perimeter. Fire lines within EEZs will be installed by hand crews rather than by dozers. As with the entire Fairbanks project area, the EEZs are not upslope of any neighboring communities. The Fairbanks project area is separated into three non-contiguous areas that are 13 acres, 20 acres (10 of which are control – no treatment acres), and 37 acres, and are divided by tributaries of Caspar creek. Each non-contiguous area is about 1,000 feet from the next. Project activities would not result in the exposure of people or structures to substantial risks related to post-fire flooding or landslides due to the location of the activities relative to the community and the minor and well-spaced acreage to be treated.</p>						
<p><b>Other Impacts related to Wildfire:</b> Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?</p>				No	N/A	<input checked="" type="checkbox"/>

## EC-17: ADMINISTRATIVE STANDARD PROJECT REQUIREMENTS

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR AD-1 Project Proponent Coordination:</b> For treatments coordinated with CAL FIRE, CAL FIRE would meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>

<p><b>SPR AD-2 Delineate Protected Resources:</b> The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. “Protected Resources” refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>Prior to project implementation, project boundaries and protected resources will be mapped, flagged, and defined, making sure project activities avoid protected resources and stay within the project boundaries.</i></p>			
<p><b>SPR AD-3 Consistency with Local Plans, Policies, and Ordinances:</b> The project proponent would 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.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>The project will be carried out in a manner that is consistent with all local plans, policies, and ordinances.</i></p>			
<p><b>SPR AD-4 Public Notifications for Prescribed Burning:</b> At least three days prior to the commencement of prescribed burning operations, the project proponent would: 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 would 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.</p>	Yes	<u>CAL FIRE</u> Prior	<u>CAL FIRE</u>
<p><i>Prescribed fire signs will be placed within the project area 3 days prior to firing activities. Notifications will be distributed through regular social media outlets by the Unit PIO. County Supervisors will be notified as required in SPR AD-4.</i></p>			
<p><b>SPR AD-5 Maintain Site Cleanliness:</b> If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types.</p>	Yes	<u>CAL FIRE</u> During	<u>CAL FIRE</u>
<p><i>Trash receptacles will not be needed on-site. All staff will be trained and will be advised to remove all trash generated daily. Flagging will be removed once the project has been completed and is no longer needed to protect the resources.</i></p>			

<p><b>SPR AD-6 Public Notifications for Treatment Projects.</b> One to three days prior to the commencement of a treatment activity, the project proponent would post signs in a conspicuous location near 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 would be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> Prior</p>	<p><u>CAL FIRE</u></p>
<p><b>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects.</b> For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. This SPR applies to all treatment activities and all treatment types.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> Prior-During-Post</p>	<p><u>CAL FIRE</u></p>
<p><b>SPR AD-8 Request Access for Post-Treatment Assessment.</b> For CAL FIRE projects, during contract development, CAL FIRE would include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period would be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types.</p>	<p>Yes</p>	<p><u>CAL FIRE</u> Post</p>	<p><u>CAL FIRE</u></p>
<p><b>SPR AD-9. Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required.</b> When planning a treatment project within the Coastal Zone, the project proponent would contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. This SPR applies to all treatment activities and all treatment types.</p>	<p>No</p>	<p><u>CAL FIRE</u> N/A</p>	<p><u>CAL FIRE</u></p>

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## EC-18: MANDATORY FINDINGS OF SIGNIFICANCE

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

### Discussion

***No additional comments.***

**Additional information:**

- List of Standard Project Requirements (SPRs) and Mitigations Measures (MMs). (See Attachment A)
- Vicinity map on a USGS quad map
  - Aerial imagery of subsequent activity area
  - Subsequent activity location on Treatable Landscape Map
  - Parcel map with APN's covering all ownerships within subsequent activity area– **All ownership is State Forest**
  - Soil survey map of subsequent activity area
- Smoke Management Plan/Burn Plan (SPR AQ-2 & 3) – **SMP will be submitted/approved prior to burning**
  - Public Notice for Prescribed Burning - **will be posted prior to burning**
  - Model run of FOFEM, BEHAVE, or other appropriate fire behavior modeling simulation- **BEHAVE model will be submitted with Burn Plan**
  - Burn Unit Maps – Ortho and Topographic - **will be submitted prior to burning & with completion report**
- Air District Asbestos Dust Control Plan (SPR AQ-5) – **Not Applicable**
- Incident Action Plan (IAP) (SPR AQ-6) – **will be submitted with completion report**
- Archaeological reviews/surveys (Confidential addendum) (EC-4)
- Biological review/surveys (EC-5)
  - CNDDDB Records Search
  - Biologist Consultation/Notification – **see comment letter**
  - Water Quality consultation – **see comment letter**
  - Consult Attachment C (and Cal VTP Appendix BIO-3)
- Biological Compensation Plan (MM BIO-1c, 2c, 2d, 2e, 2f, 3b, 3c,) – **See MM BIO-2d**
- Geological Review – **see CGS comment letter**
- Spill Prevention & Response Plan (SPR HAZ-5) – **Not Applicable**
- Traffic Management Plan (SPR TRAN-1) –**If needed, a TMP will be submitted to Mendocino County prior to commencement of treatment activities on or near county roads.**
- Organic waste Disposal Plan (SPR UTIL-1) – **Not Applicable**
- Air Quality and GHG Emissions Estimates (SPR GHG-1) **see GHG analysis**
  - Air Quality consultations - **SMP will be submitted/approved prior to burning**
- Off-Site Noise-Sensitive Receptors Notification (SPR NOI-6) - **see example letter and list of neighbors**

Other \_\_\_\_\_

**DELIVERABLES POST APPROVAL**

- Public Notification (News/Press Release)
- Authorized PFIRS Ignition Request
- Live Fire Notification
- Approved FC 400
- Public Notifications to neighbors
- Weather Forecasts/Spot weather Forecasts
- Go NO Go Checklist
- Incident Action Plans (IAP's, Prescribed burn activities)
- Completion Reports to Region
- Other: FC 33, Project Photos