Gallo, Delicato & Stone CalVTP # 2023-02

Project Specific Analysis to the CalVTP PEIR

Prepared for:

Northern Sonoma County Fire Protection District

20975 Geyserville Ave.

Geyserville, CA 95441

Prepared by:

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ATTACHMENTS

Common Terms and Acronyms Key:

RPF: Registered Professional Forester.

RPA: Registered Professional Archaeologist

SPR: Standard Project Requirement

PSA: Project Specific Analysis

PEIR: Program Environmental Impact Report

MMRP: Mitigation monitoring and reporting program

MM: Mitigation measures

CalVTP: California Vegetation Treatment Program

CNDDB: California Natural Diversity Database

CNPS: California Native Plant Society

DBH: Diameter at Breast Height

SRA: State Responsibility Area

WLPZ: Watercourse and Lake Protection Zone

TPA: Trees per acre

PCA: Pest Control Advisor

QAL: Qualified Applicator's License

LWD: Large Woody Debris. Existing downed logs which are highly valuable to wildlife.

Dead and Down: Vegetation that is dead and either in contact with the forest floor or standing.

% Canopy Cover: An average percentage of the sky that is covered by overstory or understory canopy as measured with a densitometer utilizing random plot survey methods.

% Live Crown = (Height of live crown / Total tree height) X 100

Lop and Scatter: Vegetation treatment technique where removed branches, shrubs, and trees are cut into manageable pieces and scattered around a treatment area to slowly break down into the ground over time.

INTRODUCTION

PROJECT OVERVIEW

The California Vegetation Treatment Program (CalVTP) directs implementation of vegetation treatments to reduce wildfire risk, while protecting natural resources and public property from wildfire. The Program Environmental Impact Report (PEIR) for the CalVTP was developed in 2019, under the direction of CEQA lead agency, California Board of Forestry and Fire Protection, in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines.

This PSA is prepared to assess treatment areas planned for the approximately 1,233 acre project area, located in Sonoma County.

CEQA LEAD AGENCY AND PROPOSED PROJECT

Northern Sonoma County Fire Protection District will function as the lead agency and project proponent for this CalVTP. The project proponent is solely responsible for the prescription of all vegetation treatments proposed, including the implementation, and monitoring of the vegetation treatments, mitigation measures, and SPRs shown in attachment A. The Lead Agency is responsible for making the final determination regarding this proposed projects CEQA compliance and the necessity or lack thereof for further environmental review.

The following PSA, and corresponding attachments, were prepared by Frontier Resource Management. The treatment activities and treatment types were selected by the project proponent for inclusion in this PSA. Frontier Resource Management does not make the determination that the proposed treatment activities are within the scope of the PEIR, but rather provides the evaluation, surveys, and documentation required by CEQA for consideration by the lead agency. Northern Sonoma County Fire Protection District is responsible for determining if the proposed treatments are within the scope of the PEIR, based on the information contained in this PSA and supporting attachments.

The treatment types being proposed are fuel breaks and ecological restoration. The treatment activities may include manual treatment, mechanical treatment, herbicide treatment, prescribed burning, and prescribed herbivory. Ongoing maintenance will involve the same treatment types as the initial treatments.

STATEMENT OF PURPOSE

This document serves as the PSA to determine if the project as proposed is within the scope of the CalVTP PEIR, to provide CEQA compliance for the proposed vegetation treatments. The MMRP, which identifies the SPRs and MMs applicable to the project is located in attachment A. Attachment B contains the biological assessment (a botany report will be amended prior to operations). Attachment C includes all project maps. Attachment D contains the confidential archaeology report prepared by ALTA Archaeological consulting.

VEGETATION TREATMENT PLAN

CURRENT FOREST CONDITIONS

The 1,233-acre project area is situated roughly 1.5 air miles south of Geyserville, in Sonoma County, between Hwy 101 and Dry Creek Rd. The property lies within portions of Sections 29, 30, 31, & 32 Township 10N, Range 9W; Sections 25 & 36 Township 10N, Range 10W; Section 6 Township 9N, Range 9W, in the Geyserville USGS 7.5 Minute Quadrangle. The elevation ranges between 240 ft – 840 ft above sea level and can be delineated into 3 distinct forest types. Oak woodlands make up most of the project area at approximately 897 acres, followed by the Coast Redwood/Douglas-fir Forest at 290 acres, and finally the Oak/manzanita forest on 46 acres.

All forest types are currently exhibiting increased aerial, ladder, and surface fuels due to overstocked conditions and lack of disturbance. The resulting TPA and fuel loading is far greater than what these ecosystems are adapted to endure, which has implications for available water and nutrients cycling as well as on habitat for sensitive plant and animal species. These conditions have also led to various forest health conditions, such as poor crown growth, insect and disease infestation, and slowed tree growth.

Oak woodlands:

The oak woodlands are comprised of Interior live oak *(Quercus wizlizeni),* Coast live oak *(Quercus agrifolia),* California black oak *(Quercus kelloggii),* Oregon white oak *(Quercus garryana),* Pacific madrone *(Arbutus menziesii),* Big-leaf maple *(Acer macrophyllum),* Douglas-fir *(Psuedotsuga menziesii),* and various understory species. These stands vary in tree density, with an estimated stocking ranging from 100 TPA to over 450 TPA within the denser areas. Tree health within these stands is moderately healthy, but signs of decline are beginning to be evident due to the overstocked condition. Mistletoe and other insect/disease infections exist throughout these oak woodlands in varying degrees, tending to aggregate in clusters or patches were prevalent.

Conifer encroachment is not a concern in this type of oak woodland, as it is capable of holding both conifer and oak at a mixed scale, i.e., the soil is of greater quality than that of a true oak woodland. In fact, conifer growth should be encouraged on the northern facing slopes to increase biodiversity and overall forest health.

Coast Redwood/ Douglas-fir:

The Coast Redwood/Douglas-fir Forest type is comprised of Coast redwood (*Sequoia Sempervirens),* Douglas-fir *(Psuedotsuga menziesii),* Pacific madrone *(Arbutus menziesii)*, California bay laurel *(Umbellularia californica),* Interior live oak, California black oak, Oregon white oak, and various understory species. These stands are generally unhealthy with evidence of reduced vigor from insect/disease infestation brought on by competition for light, water, and nutrients. Conditions are overstocked in most of these stands, with between 300-600 TPA in some areas.

Oak/manzanita

The Oak/Manzanita stand is a unique stand of Coast live oak *(Quercus agrifolia)* and California black oak *(Quercus kelloggii),* with an understory of manzanita. The manzanita is very established throughout, reaching tree size (>8" DBH) in some cases. This area is a sensitive natural community as listed by CDFW. The *Quercus Kelloggii – Arctostaphylos patula* relationship is listed as sensitive and the *Quercus agrifolia – Quercus kelloggii* is listed as sensitive as well. This stand will be protected with mitigation measures listed in the biological section below. See impact BIO-3 for more information.

The stand is relatively healthy, with few signs of insect and disease infestation, yet the threat of devastating wildfire is persistent. The manzanita understory must be thinned to prevent catastrophic loss during a wildfire event. Thinning will be conducted in a way to preserve the unique vegetation relationships currently existing. By retaining at least 50% of the Manzanita, these relationships can be maintained, and invasive species controlled.

TREATMENT GOALS AND SPECIFICATIONS

The Gallo, Delicato, & Stone CalVTP is proposed by the project proponent to improve forest health, increase fire resilience, and reduce the risk of wildfire throughout the 1,233-acre project area. The following goals and specifications describe the target structure of the different forest types. The tree density specifications pertain mostly to the ecological restoration treatment types. Fuels breaks and WUI treatments will generally remove more understory vegetation and retain less TPA. The long-term objectives for these forests are:

- Increase tree spacing
- Reduce fuel loading and insect/disease infestation
- Improve wildlife habitat and continuity
- Improve tree health
- Increase forest fire and drought resilience
- Reduce and control invasive non-native species
- Create a heterogeneous forest structure
- Increase species diversity

Treatment Specifications for all Forest Types:

- The degree of treatment to understory shrubs will vary depending on the treatment types below (i.e. Shaded Fuel Break vs Ecological Restoration).
- Trees will be retained that are free from insect and disease infestation and show no signs of tree bole instability.
- In young stands where most trees are < 12" DBH, cut/retention trees will be selected by an RPF (or RPF designee) to ensure a healthy future stand. The optimum tree spacing shall be determined based on site-quality, tree species, and stand age.
- Trees showing signs of reduced vigor, insect/disease infestation, and/or poor crown health shall be targeted for removal.
- Retention trees will be pruned to a height of 8-12 feet, but the live crown shall not be reduced below 50%.
- Limit "high stumps". Cut trees to 6" above the ground where feasible.
- When dispersing chips throughout the treatment area, prevent the piling of chips greater than 8" above the ground where feasible.
- Do not allow chips to accumulate at the base of retained trees; make sure there is separation between the tree bole and the chips.
- When utilizing lop and scatter to treat fuels, material will be lopped below 30" above the ground.
- Constructed burn piles should be less than or equal to 20' diameter and should not be placed close enough to damage retained trees. The acceptable distance of a pile to a tree will depend on: The piles' overall size, the topography, the weather at time of ignition, the retained tree's structural integrity, and the fuel moisture.
- Treat existing dead and down throughout all treatment types, but retain most LWD > 16" diameter.
- Trees determined by an RPF or Arborist to die within 5 years, may be removed regardless of DBH, species, or age.
- Snags should be retained where feasible within ecological restoration treatment types. Removal of snags may occur throughout shaded fuel breaks. Snags shall be inspected by an RPF or Biologist, for the presence of sensitive species prior to removal.

Treatment Specifications - Oak Woodlands: *Target stocking post treatment = 100 - 250 TPA*

- Treatments will focus on thinning trees with a < 6" DBH. Not all trees in this size class should be removed. Understory trees are a vital part of forest regeneration and will be retained in strategic locations to fill canopy gaps. Retain as many true oak species in the understory as possible. Target removing Douglas-fir, bay, pacific madrone, and brush species.
- Some large trees may be removed where an aerial fuel break is desired. Target a 20-50 foot average spacing between retained trees. Favor retaining true oaks.
- Ensure large retained oaks > 20" are not damaged during operations.
- Prevent the spread of plant pathogens. See SPR BIO-6 for equipment sanitation and other BMPs.

Treatment Specifications – Coast Redwood/Douglas-fir stands: *Target stocking post treatment = 200-350 TPA*

- Treatments will focus on thinning trees with a < 10" DBH. Not all trees in this size class should be removed. Understory trees are a vital part of forest regeneration. Target spacing for understory trees is 15-20 ft within ecological restoration treatments. Shaded fuel breaks may achieve a much greater tree spacing.
- Some large trees may be removed where an aerial fuel break is desired or where posing a safety hazard.

Treatment Specifications – Oak Woodland/ Manzanita Alliance (*sensitive natural communities*):

- Avoid the application of high intensity fire within this area. Limit burn pile density to < 17 piles/acre, or ~ 50 ft between piles.
- For all treatments within this mapped area, a minimum of 50 percent relative cover of existing Manzanita and associated native understory vegetation will be retained (evenly or in a mosaic pattern) throughout the treatment area.
- Retain all Oak species not posing a risk to public safety.
- See Impact BIO-3 below for more information regarding limitations for this area.

TREATMENT TYPES

The following treatment types are proposed: Fuel breaks and ecological restoration (see Operations Maps in attachment C). The treatment activities may include mechanical, manual, herbicide application, prescribed burning (Broadcast and Pile), and prescribed herbivory.

Fuel Breaks:
Shaded Fuel Breaks will be created 100 feet on both sides of trails, roads, structures, and ridgelines. These treatments will provide staging areas to support firefighting and will provide control lines during prescribed fire activity. Most of the understory vegetation will be removed, while retaining a high degree of canopy cover to slow the brush regeneration. Up to 75% of existing ground fuels, shrubs, and trees < 6" DBH may be removed, chipped, or burned. If the fuel break is comprised of a young stand predominantly under 12" DBH, trees will be retained as described above in the treatment specifications. Once cut, all vegetation will be chipped, burned (piled or broadcast), or lopped and scattered.

Herbicides may be used within these areas where necessary to prevent invasive and resprouting species. This will ensure the fuel break is maintained. A PCA shall be consulted prior to any herbicide application. *All herbicide use shall comply with SPR HAZ-5 , HAZ-6, HAZ-7, HAZ-8, and HAZ-9 as shown in attachment A*. Snags may be removed unless, it has been determined to be critical habitat for a listed species. If so, CDFW will be consulted prior to snag removal.

Ecological Restoration:

Ecological restoration treatments are designed to restore an ecosystem to a historical state. These conditions vary depending on the degree and extent of disturbance the ecosystem is adapted to. Due to disturbance exclusion from California's fire-adapted forests over the last 2 centuries, the forest has become overgrown with small unhealthy trees. Restoration activities will focus on reducing densities of trees, shrubs, and invasive species. The treatments will mimic fire by removing non-fire resilient trees and ladder fuels. By removing vegetation in this way, trees and grassland will be allowed to re-establish in areas that have been overstocked.

Prescribed herbivory, manual, mechanical, and prescribed burning treatments may be utilized throughout the project area. Treatments in these areas will be focused on removing enough ground and ladder fuels to prevent crown fires. The main goal is to return the stands to a historical stocking level. Treatments will vary by forest type. See treatment specifications above. Snags and LWD will be retained within this treatment area, unless they pose a threat to public safety, or exhibit uncharacteristically high densities.

TREATMENT ACTIVITIES

- *For all treatment activities: The project proponent is responsible for prescribing and implementing these treatment activities including the mitigations and monitoring described in this PSA and Attachment A. Containment of any fire resulting from vegetation treatment activities is the responsibility of the vegetation treatment contractors and project proponent.*

Mechanical Treatments

The property is generally very steep, resulting in most areas being inaccessible by heavy equipment. Approximately 274 acres are proposed to be treated with heavy equipment. See Attachment C maps. During field reconnaissance, the RPF determined which areas would be best suited for mechanical treatment based on environmental conditions. Slope, unstable areas, sensitive species habitat, WLPZs, and vegetation density were among the factors considered during the assessment. Mechanical treatments may occur within these mapped areas as well as along existing roads; vegetation may be mechanically treated, outside of mapped areas, if it can be reached with the machine's arm, while the tracks or wheels are within the road surface.

During mechanical treatments 1-2 pieces of heavy equipment (both tracked and rubber tired) shall be used to cut, uproot, crush/compact, or chop trees and brush. Mostly this will entail utilizing a mastication head to roughly chip target vegetation and disperse onsite, although, tilling, roller chopping, chaining, and skidding may occur as well. The types of equipment used to complete these treatments will include excavators, skid steers, feller bunchers, tracked chippers, etc. Mechanical treatments remain the most effective way to achieve the project goals and will thus be utilized where possible.

Manual Treatments

Manual treatments may be utilized on approximately 959 acres. These treatments involve between 5-20 laborers utilizing chainsaws, pole saws, tracked, and tow behind chippers. Cut material will be either lopped and scattered, chipped, or piled and burned in accordance with the treatment specifications above. Lop and scatter shall not occur within 150 ft of all structures.

Prescribed Burning Treatments

- *Frontier Resource Management (FRM) does not recommend this method of treatment be utilized, by untrained individuals, to accomplish the forest management goals outlined in this document. FRM is only assessing the potential environmental effects from all potential treatments on the various forest resources present, based on the PEIR completed by the BOF in 2019. FRM is not prescribing or recommending any specific treatment method to achieve the forest management goals. The project proponent is not condoning the use of fire on this property without the written consent and approved burn plan of the Northern Sonoma County Fire Protection District (NSCFPD). The NSCFPD and landowners may enter into an agreement with CALFIRE or another agency to develop an agreement in writing determining who is assuming responsibility for operations, and subsequent liability.*

As per the 2019 CalVTP PEIR, Prescribed burning may be implemented by the project proponent on all 1,233 acres to reduce the surface and ladder fuel continuity. The intensity of this treatment varies depending on many factors. No broadcast burning shall occur until a burn plan has been developed (see Attachment A; SPR AQ-2 and SPR AQ-3). The project proponent and lead agency are responsible for ensuring any prescribed burning is contained and that ignition is conducted within the burn window, as described in the burn plan. In general, any burning conducted during the initial treatments would be of greater intensity and have an increased potential for escape, as the fuel loads are currently very high throughout the treatment area. Initial mechanical and manual treatments will reduce fuels loads.

A loader, excavator, dozer, or skidder may be utilized to control fire lines where hand lines are not sufficient and where mechanical treatment activities are permitted.

Herbicide Treatments

Herbicides may be applied throughout the entirety of the proposed project, except within the unstable area STZ's or any biological STZs that become amended to the plan at a later date. See Attachment C, maps. Prior to herbicide application, a PCA will prepare a recommendation for the treatment areas. Application of an herbicide, immediately following initial treatments will reduce the extreme regrowth of the understory (particularly within the fuel break treatments). Without control, brush and other understory species will regrow rapidly and pose a secondary threat to fuel break and WUI infrastructure.
All herbicide use shall comply with SPR HAZ-5 , HAZ-6, HAZ-7, HAZ-8, and HAZ-9 as shown in attachment A.

Prescribed Herbivory

Targeted grazing of brush and understory may occur throughout the entirety of the proposed project, except within the unstable area STZ's or any biological STZs amended to the plan. See Attachment C, maps. All tree and shrub grazing shall follow the limitations defined in Attachment A SPRs. This treatment activity may entail between 50 - 200 goats/sheep.

CalVTP PROJECT INFORMATION

1. **Project Title:** Gallo, Delicato & Stone CalVTP

   Project #: 2023-02

2. **Project Proponent Name and Address:**

   Northern Sonoma County Fire Protection District

   PO Box 217

   Geyserville, CA 95441

3. **Contact Person Information and Phone Number:** Marshall Turbeville, (707) 857-4373

4. **Project Location:** South of Geyserville, CA, within Sonoma County. The project is proposed on portions of private property, located within the following Pacific Land Survey description. Sections 29, 30, 31, & 32 Township 10N, Range 9W; Sections 25 & 36 Township 10N, Range 10W; Section 6 Township 9N, Range 9W, in the Geyserville USGS 7.5 Minute Quadrangle.

5. **Total Area to be Treated (acres)** 1,233 Acres.

6. **Description of Project**:

   a. **Initial Treatment**

   - *See Vegetation Treatment Plan above.*

   Treatment Types

   ☐ Wildland-Urban Interface Fuel Reduction

   ☒ Fuel Break

   ☒ Ecological Restoration

   Treatment Activities

   ☒ Prescribed Burning (Broadcast), **1,233** acres

   ☒ Prescribed Burning (Pile Burning) **959** acres

   ☒ Mechanical Treatment, **274** acres

   ☒ Manual Treatment, **959** acres

   ☒ Prescribed Herbivory, **1,233** acres

   ☒ Herbicide Application, **1,233** acres

   Note: Multiple treatment activities may be applied in the same area

Fuel Type [*see description in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in description of Initial Treatment*]

☒ Grass Fuel Type

☒ Shrub Fuel Type

☒ Tree Fuel Type

   b. **Treatment Maintenance**

- *Estimated treatment maintenance is based on each initial treatment completed. It is not anticipated that the initial treatment shall be completed on the entire project within 5 years of project approval.*

- *Treatment maintenance timing and scope will vary depending on the level of understory regrowth in response to initial treatments, which is highly dependent on-site quality, water availability, soils, aspect, initial treatment intensity, use of herbicides, etc…*

  Fuel Break Maintenance:

  Treatments within the Fuel Break areas will reoccur every 3-10 years depending on the effectiveness of the initial treatments and the level of vegetation regeneration. It is anticipated that vegetation will regrow quickly within the fuel breaks due to the greater disturbance associated with these types of treatments. A high canopy closure along with herbicide use will slow understory re-initiation. If herbicides aren't utilized, it is highly likely the fuel breaks will require retreatment after roughly 3 years. Alternatively, if herbicides are applied to target vegetation within the fuel break (i.e. vigorously resprouting and/or invasive species) maintenance treatments may not be necessary for 10 years.

  Ecological Restoration Maintenance:

  One of the goals within these treatment types is to maintain a high overall canopy closure, resulting in slow regeneration of the understory. It is estimated that treatment maintenance within these areas shall occur every 10-20 years, focusing mainly on treating dead and down. Again, the maintenance period will depend on the vegetation response to treatment.

- *For maintenance of all treatment types: An assessment will be made by the project proponent which will determine when maintenance treatments shall occur. This will be based on regenerated vegetation and fuel loading.*

Treatment Types *[see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in description of Treatment Maintenance*]

☐ Wildland-Urban Interface Fuel Reduction

☒ Fuel Break

☒ Ecological Restoration

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 Treatment Maintenance*]

☒ Prescribed Burning (Broadcast), **1,233** acres

☒ Prescribed Burning (Pile Burning) **959** acres

☒ Mechanical Treatment, **274** acres

☒ Manual Treatment, **959** acres

☒ Prescribed Herbivory, **1,233** acres

☒ Herbicide Application, **1,233** acres

Fuel Type [*see description in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in description of Treatment Maintenance*]

☒ Grass Fuel Type

☒ Shrub Fuel Type

☒ Tree Fuel Type

Use of the PSA for Treatment Maintenance

Prior to implementing a maintenance treatment, the project proponent will 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 will be considered by the project proponent in light of changed conditions or circumstances. Where the project proponent determines the PSA is no longer sufficiently relevant, the project proponent will 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 will 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 conditions are substantially similar to those anticipated in the PSA. Updated information will be documented.

7. **Regional Setting and Surrounding Land Uses:** The project area is within Sonoma County near Geyserville, CA. The project area is comprised of privately owned vineyards surrounded by forests. The land uses within and adjacent to this property are cattle grazing, hunting, timber harvesting and agricultural production.

8. **Other Public Agencies Whose Approval is Required**: (e.g., permits)
    - An Air Quality Permit will be obtained from NSCAPCD.
    - A burn permit will be obtained from CALFIRE when required.
    - Pesticide application permit through the Sonoma County CAL Ag permit.

    Coastal Act Compliance

    ☒ The proposed project is NOT within the Coastal Zone

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

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

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

9. **Native American Consultation**. *For treatment projects that are within the scope of the CalVTP PEIR, AB 52 consultation for AB 52 compliance has been completed. The Board of Forestry and Fire Protection conducted consultation pursuant to Public Resources Code section 21080.3.1 during preparation of the PEIR*. Pursuant to CalVTP SPRs, Native American tribes were contacted on May 5th, 2023, by ALTA Archaeological Consulting. Results of these consultations are included in attachment D which is maintained as a confidential document.

DETERMINATION (To be completed by the project proponent)

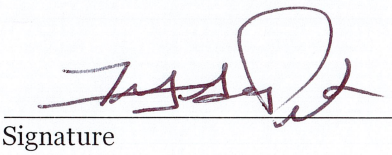
On the basis of this PSA and the substantial evidence supporting it:

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

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

☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR or will have effects that are substantially more severe than those covered in the CalVTP PEIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP PEIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project 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 significant environmental effects that are (a) new and were not covered in the CalVTP PEIR and/or (b) substantially more severe than those covered in the CalVTP PEIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an ENVIRONMENTAL IMPACT REPORT will be prepared.



Signature

8/17/2023

Date

Fred Peterson

Printed Name

Board President

Title

NSCFPD

Agency

PROJECT SPECIFIC ANALYSIS/ADDENDUM

AESTHETICS AND VISUAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	LTS	Impact AES-1, pp. 3.2-16 – 3.2-19	No	None	NA	None	NA	NA
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	No	None	NA	None	NA	NA
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	PS	Impact AES-3, pp. 3.2-25 – 3.2-27	No	NA	None	NA	NA	NA

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; SU: Significant and unavoidable. PS: Potentially Significant

New Aesthetic and Visual Resource Impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
	☐	☐	☐

Discussion

Impact AES-1; AES-2; AES-3
The project area is not within view of a public scenic vista or scenic highway.

PD-3.2: AGRICULTURE AND FORESTRY RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AG-1: Directly Result in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	LTS	Impact AG-1, pp. 3.3-7 – 3.3-8	Yes	NA	NA	LTS	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; SU: Significant and unavoidable. PS: Potentially Significant

New Agriculture and Forestry Resource Impacts: Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact AG-1

Initial and maintenance treatments will encourage a healthier forest condition by removing competing vegetation and in some cases scarifying the ground, allowing for desirable tree species to seed in. The project will focus on removing trees less than 10" DBH, and brush species, which will not have a significant negative effect on the forest structure. Not all trees in this size class will be removed, thus preventing a future conversion, due to lack of regeneration in the understory.

The treatments proposed will protect this forest from a stand replacing wildfire, which would have the potential to convert the forest land into a brush dominated pioneer species structure. This would have the potential to initiate a cycle of high intensity wildfires which could create an adaptation towards chapparal species.

After assessing the proposed treatments and their effect on the potential for converting forest land within the project area, the project proponent has determined that the treatments will in fact protect forest resources from conversion.

PD-3.3: AIR QUALITY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	PSU	Table 3.4-1; Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AD-4, AQ-1, AQ-2, AQ-3, AQ-4, AQ-6	AQ-1 See exclusions in discussion	PSU	No	Yes
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	Table 3.4-6; Impact AQ-2 pp. 3.4-33 – 3.4-34; Appendix AQ-1	Yes	HAZ-1, NOI-4, NOI-5	NA	LTS	No	Yes
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	LTS	Section 3.4.2; Impact AQ-3, pp. 3.4-34 – 3.4-35	No	None	NA	NA	NA	NA
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	PSU	Section 3.4.2; Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AD-4, AQ-2, AQ-3, AQ-6	NA (No feasible mitigation available)	PSU	No	Yes
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	LTS	Impact AQ-5, pp. 3.4-37 – 3.4-38	Yes	HAZ-1, NOI-4, NOI-5	NA	LTS	No	Yes
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	PSU	Section 2.5.2; Impact AQ-6; pp. 3.4-38	Yes	AD-4, AQ-2, AQ-3, AQ-6	NA (No feasible mitigation available)	PSU	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PSU: Potentially Significant and unavoidable. PS: Potentially Significant

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact AQ-1
Emissions of criteria air pollutants related to the proposed treatment are within the scope of the PEIR because the associated equipment and duration of use are consistent with those analyzed in the PEIR. The applicable SPRs will be implemented during treatments. AQ-5 would not apply to this project because there are no known asbestos areas within the treatment units.

The overall impact was determined to be Potentially significant and un-avoidable by the PEIR. Mitigation measure AQ-1 will be applied where feasible and will, along with the SPRs, reduce the impact. The following mitigation measures listed under AQ-1 will not be applied due to lack in technology and infeasibility at the local level:

- Electric and gasoline-powered equipment will be substituted for diesel-powered equipment.
    - *Currently there are no alternatives available which offer the functional ability to handle the workload required for the treatment activities. Diesel engines are the most efficient and widely available option for completing fuels treatments, particularly with regards to mechanical treatment activities. Furthermore, gasoline engines lack the torque required to complete treatments on steep slopes under extreme loads. This is where diesel engines have an advantage, allowing treatment on areas which would otherwise be untreatable. Diesel powered equipment also has a greater workload ability, allowing work to be completed faster. This has both an economic impact to the project as well as a reduced duration of air quality offense.*

      Lithium-ion batteries lack the range and charging speed to allow "theoretical" electric powered heavy equipment to complete the job within any sort of real-world efficiency. Because the jobs are so far from any charging station, it would be necessary to have a mobile charging source. That charging source would likely require a gas-powered generator to work, thus defeating the purpose of the mitigation measure.

      Ultimately, the technology is lacking, both locally and elsewhere, to include this mitigation measure.

Impact AQ-2
Use of mechanical equipment during initial and maintenance treatments could expose people to diesel particulate matter emissions. This potential was examined within the PEIR and found to be less than significant. These types of emissions for the treatment activities are within the scope of the PEIR because they are the same, including types of equipment and potential duration of treatment.

Impact AQ-3
NA: No naturally occurring asbestos is known to occur within the treatment area.

Impact AQ-4
Prescribed burning during initial and maintenance treatments could expose people to toxic air contaminants, which was examined in the PEIR. The duration and parameters of prescribed burns are the same as addressed in the PEIR, therefore the potential exposures are within the scope of the PEIR. All feasible SPRs for controlling smoke emissions are included in this PSA as well as the PEIR and no further mitigations are feasible. The impacts remain significant and unavoidable as identified in the PEIR. Nevertheless, these impacts are significantly less than those created during large scale wildfires. The goal of these treatments being to prevent devastating large-scale wildfires, and thus large-scale impacts to air quality.

Impact AQ-5
The use of diesel equipment during operations could expose people to objectionable odors. This potential was examined in the PEIR and found to be less than significant. The potential impact from this project is within the scope because the duration, equipment used, and treatment activities are consistent with those analyzed in the PEIR.

Impact AQ-6

Prescribed burning during initial and maintenance treatments could expose people to objectionable odors. This potential was examined in the PEIR and found to be potentially significant and unavoidable. Nevertheless, these impacts are significantly less than those created during large scale wildfires. The goal of these treatments being to prevent devastating large-scale wildfires, and thus large-scale impacts to air quality. The potential impact from this project is within the scope because the duration, equipment used, and treatment activities are consistent with those analyzed in the PEIR.

PD-3.4: ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	LTS	Impact CUL-1, pp. 3.5-14 – 3.5-15	Yes	CUL-1, CUL-7, CUL-8	NA	LTS	No	Yes
Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	PSU	Impact CUL-2, pp. 3.5-15 – 3.5-16	Yes	CUL-1 through CUL-5, CUL-8	CUL-2	LTSM	No	Yes
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	LTS	Impact CUL-3, p. 3.5-17	Yes	CUL-1 through CUL-6, and CUL-8	NA	LTS	No	Yes
Impact CUL-4: Disturb Human Remains	LTS	Impact CUL-4, p. 3.5-18	Yes	NA	NA	LTS	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; LTSM: Less than significant with mitigation; PSU: Potentially Significant and unavoidable; PS: Potentially Significant

New Archaeological, Historical, and Tribal Cultural Resource Impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

ALTA Archaeological consulting conducted a survey and report to satisfy CEQA requirements regarding historical and prehistorical resources. All results of these SPRs are maintained as a confidential document in attachment D.

Impact CUL-1

The proposed treatments have the potential to damage historical resources and this 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 the impact will be less than significant with the inclusion of the SPRs.

Impact CUL-2
Vegetation treatments include mechanical treatments that could disturb the ground, potentially resulting in damage to unknown archaeological resources. A survey and NWIC records search have been conducted by a professional archaeologist and the results are maintained in a confidential document. 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. As per Mitigation Measure CUL-2, any archaeological resource discovered during treatments will be given 100 ft avoidance, and protection measures will be developed by an Archaeologist.

Impact CUL-3
This impact was assessed in the PEIR and with the inclusion of the SPRs listed, the impact will be less than significant. These SPRs have been completed and Native American groups were notified of the project and requested for information regarding cultural resources. The results are maintained as confidential in attachment D.

Impact CUL-4
There is a potential for treatment activities to uncover human remains due to the nature of the treatment activities. The potential for treatment activities to uncover human remains was examined in the PEIR. This impact is within the scope of the PEIR because the intensity of ground disturbance, the equipment used, and the duration of their use is the same as those analyzed in the PEIR.

PD-3.5: BIOLOGICAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	PS	Impact BIO-1, pp 3.6-131–3.6.138	Yes	BIO-1, BIO-2, BIO-3, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HYD-4	BIO-1a, BIO-1b ** Only applicable if individuals are discovered during botany surveys*	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTS (all wildlife species except bumble bees) S&U (bumble bees)	Impact BIO-2, pp 3.6-138–3.6-184	Yes	BIO-1, BIO-2, BIO-9, BIO-10, GEO-1, HYD-4, GEO-2, GEO-3	BIO-2a BIO-2b **Only applicable if individuals are discovered by RPF or Biologist during focused surveys.*	LTSM	No	Yes
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	LTS	Impact BIO-3, pp 3.6-186–3.6-191	Yes	BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-9, HYD-4	NA	LTS	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTS	Impact BIO-4, pp 3.6-191–3.6-192	Yes	BIO-1, BIO-2, HYD-4	None	LTS	No	Yes
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTS	Impact BIO-5, pp 3.6-192–3.6-196	Yes	BIO-1, BIO-2, HYD-4	None	LTS	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197–3.6-198	Yes	BIO-1, BIO-2, BIO-3, BIO-4,	NA	NA	NA	Yes

Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
				BIO-5, BIO-12				
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	No Impact	Impact BIO-7, pp 3.6-198–3.6-199	No	None	NA	NA	NA	NA
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	No Impact	Impact BIO-8, pp 3.6-199–3.6-200	No	None	NA	NA	NA	NA

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; LTSM: Less than significant with mitigation; PSU: Potentially Significant and unavoidable; PS: Potentially Significant

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Pursuant to SPR BIO-1, an RPF from Frontier Resource Management conducted a data review of project-specific biological resources and a reconnaissance-level survey of the treatment areas. The main goal of these surveys was to determine the habitat suitability of the project area for the special status species identified during the data review.

Attachment B includes a comprehensive list of all special status species with potential to occur within the project area based on the SPR BIO-1 requirement for a data review of biological resources. It includes the results of a 9 quad search of the California Natural Diversity Database (CNDDB) and the California Native Plant Society Inventory of Rare and Endangered Plants of California. Appendix Bio-3 (Table 13a, Table 13b, and Table 19) of the PEIR (Volume II) was reviewed for special-status plants and wildlife that could occur within the treatment areas. Species Occurrence data was reviewed for 9 quads surrounding the project area and species determined to have a high potential for occurrence, based on project specific habitat, were included in the list of potential species.

Frontier Resource Management conducted reconnaissance-level surveys between 2022 and 2023, to identify and document sensitive resources within the treatment areas. This included aquatic habitat, riparian habitat, and potential sensitive natural communities. During these surveys, habitat suitability determinations were made for the potential special-status plant and wildlife species listed in Attachment B. Below are the final lists of special-status plant and wildlife species with a moderate to high potential of occurring within the treatment area. Some species included in Attachment B were ruled out due to lack of habitat or lack of threat from project activities.

Impact BIO-1
Initial and maintenance treatments could result in direct or indirect adverse effects to the special status plant species with potential to occur within the treatment areas. A botanical survey is being conducted and the report will be amended into attachment B prior to the start of operations. If listed or non-listed species are discovered protections will be developed and outlined in the report. See attachment B for the target list which was determined during reconnaissance surveys.

A majority of the project area will be treated under the ecological restoration treatment type. As stated in the PEIR, Biological Resources section 3.6 Pg 133,

> *"In the ecological restoration treatment type, the objective is to restore degraded, damaged, or destroyed ecosystems and habitats in fire-adapted vegetation types by returning them to their natural fire regime and returning vegetation in Condition Classes 2 and 3 to Condition Class 1[1]. This would benefit special-status plants associated with these habitats in the long-term by restoring the historic vegetation composition, structure, and habitat values and function under which these species evolved. Removal of overgrown shrubs and thinning tree canopies could benefit special-status plant populations in the short term by allowing more light to reach them and by removing competition for water, light, and nutrients; however, removal of overstory vegetation could alter microhabitat conditions in a way that is detrimental to special-status plant species in the short term if they are adapted to growing in shade or if the loss of overstory vegetation results in adverse changes in soil moisture, or destabilizes soil resulting in erosion that limits sensitive plant establishment and growth or washes away sensitive plants or their seeds and propagules with eroding soil."*

The treatments will focus on removing understory vegetation within the ecological restoration treatments, thus benefiting potential special-status plant populations. Mechanical treatments will occur along existing roads and within some proposed shaded fuel breaks. The mechanical treatment areas along with the shaded fuels breaks make up the areas where potential impact to sensitive plant population may occur. As a result, the SPR BIO-7 botanical survey will only focus on surveying these areas.

The treatment activities and their potential for adverse effects on special-status species is within the scope of the PEIR. With the included mitigation measures and SPRs, the impacts will be reduced to a less than significant level.

Impact BIO-2
Treatment activities could result in direct or indirect adverse effects to special status wildlife species with suitable habitat within the treatment area. See Attachment B for an analysis of all species with the potential to occur (CNDDB 9 quad search results were considered). Those species with moderate to high potential for occurrence, or which occur within 3 miles of the project area, have been included in the list below. With the implementation of the SPR's and mitigation measures listed in the table above, the potential impacts will be less than significant. The following species will be included in SPR BIO-2 training for workers. If one of these species is discovered during work activities, the RPF or qualified biologist will be notified and protection measures will be developed depending on the species, and time of year (i.e. nesting or critical breeding season). Consultations with CDFW will be initiated if avoidance is not feasible.

1 Condition class categories are described in Table 2-1 of Chapter 2, "Program Description."

Special-Status Wildlife Species with potential to Occur in the Treatment Area

(For Use During Biological Resource Training for Workers SPR BIO-2)

Birds

Great Blue Heron (*Ardea herodias*)
Status: SSC
Habitat Requirements: Great blue herons are common in shallow estuaries, and fresh and saline emergent wetlands. Foraging areas include river and creek banks, ponds, lakes, and watercourses in mountainous areas. Nest trees are called "rookery" trees; *A. herodias* is a colonial nester. This species requires lakes, ponds, streams, rivers, marshes, or wet meadows for foraging on aquatic invertebrates, frogs, snakes, and fish (Cogswell 1977). Great blue herons are yearlong residents of Sonoma County.
Potential for Occurrence: There is a low to moderate potential for this species to occur within the project area. The small ponds within the project boundary provide potential habitat. This species was not observed during reconnaissance surveys and the closest known occurrence is over 3 miles from the project.
Potential Project Impact: Due to the scope of treatments proposed and the inclusion of this species in SPR BIO-2 crew training, the potential impact will be less than significant.

Mammals

Sonoma Tree Vole (*Arborimus pomo*)
Status: None
Potential for Occurrence**:** There is a moderate potential for the Sonoma tree vole to exist within the project area. A visual search of the canopy for stick nests and the forest floor for discarded resin ducts, which accumulate below vole nests was conducted. No discarded resin ducts or STV nests were observed; however, they could be hidden up in the canopy.
Mitigations: This species will be included in the SPR BIO-2 worker training. If detected, nest trees will be retained.

North American Porcupine (*Erethizon dorsatum*)
Status: None
Potential for Occurrence: There is a moderate potential for this species to occur within the treatment units. No individuals were observed during field reconnaissance. They are commonly found in coniferous and mixed forested areas, but have adapted to harsh environments such as shrublands, tundra, and deserts. They make their dens in hollow trees, decaying logs, and caves in rocky areas.
Mitigations: Retain large downed hollow logs and trees with large basal hollows. Retain extra brush and cover around identified potential habitat elements. Workers will be trained on identification of this species and their dens.

Amphibians and Reptiles

Western Pond Turtle *(Emys marmorata)*
Status: None
Potential for Occurrence: There is a low to moderate potential for occurrence around the ponds within the property. The pond turtle is associated with permanent ponds, lakes, streams, or permanent pools along intermittent streams in a wide variety of habitats. It requires basking sites in the aquatic environment, grassy openings for nest sites, and nests are typically within 100 meters of a water source, although nests up to 500 meters have been recorded.

Mitigation: SPR HYD-4 requires the establishment of a WLPZ around watercourses and ponds. This will ensure protection of individuals and critical habitat from damaging effects of treatments. Nest sites near the project area have the potential to be impacted if located outside of the WLPZ. SPR BIO-2 will require training for workers to identify and avoid nesting sites during treatment.

California Giant Salamander (*Dicamptodon ensatus*)
Status: SSC
Potential for Occurrence: There is a moderate potential for this species to exist within the project area near cold permanent and semi-permanent streams and seepages. No individuals were observed during field reconnaissance. The closest known occurrence was immediately adjacent to the project area along Peterson creek.

Mitigation: SPR HYD-4 requires the establishment of a WLPZ around watercourses and ponds. This will ensure protection of individuals and critical habitat from potentially damaging effects of treatments. SPR BIO-2 will require training for workers to identify and avoid this species during treatment.

California Red-Legged Frog (*Rana draytonii*)
Status: Federally Threatened
Habitation Requirements: California red-legged frogs (CRLF) primarily inhabit permanent or nearly permanent water sources (quiet streams, marshes, and ponds). Breeding tends to occur primarily in ponds, less likely in streams, and happens from November to April. This frog will also use upland habitats outside of the breeding season and may be discovered under logs, rocks, and other debris during wet conditions.
Potential for Occurrence: There is a low-moderate potential for individuals to occur within the treatment areas near class I or II watercourses & springs. No individuals were encountered during field reconnaissance and the closest known occurrence is greater than 3 miles from the project boundary.
Potential Project Impact: Due to the scope of treatments proposed, there is a low potential for impact to this species. With the implementation of the BIO SPRs and HYD SPRs listed in the PSA, it is not anticipated there will be an impact to this species or its habitat. Watercourse protection measures will ensure retention of crucial habitat. Also, equipment exclusion from watercourse and lake protection zones (WLPZ) will further reduce the likelihood of take resulting from heavy equipment use. Also, SPRs GEO-1, GEO-2, and GEO-3 will prevent ground disturbance during periods of soil saturation, when this species is more likely to be active outside of the WLPZ. This species will be included in SPR BIO-2 worker training.

Red-Bellied Newt (*Taricha rivularis*)
Status: SSC
Habitation Requirements: The red-bellied newt ranges within Mendocino, Sonoma, Humboldt, and Lake Counties. They are predominantly found in redwood forests, along the coast, however, they have also been detected in mixed conifer, oak woodland, and other forest types particularly when near streams. The preferred aquatic breeding habitats are moderate to fast-flowing streams with rocky substrates. Breeding coincides with the receding of streams after heavy winter rains. Adults are terrestrial and the aquatic breeding phase lasts from February to May. After breeding, adults leave streams but usually stay in the same drainage; however, they are also known to travel several kilometers between breeding years. Underground retreats are used from May to October, and adults forage on the surface before and as they migrate to streams. (Thomas et al. 2016).
Potential for Occurrence: There is a moderate potential for individuals to occur within the treatment areas, particularly near perennial watercourses within the treatment areas. No individuals were encountered during field reconnaissance. The closest known occurrence is greater than 3 miles from the project area.
Potential Project Impact: There is a low potential for this species to be impacted during operations, but this will be mitigated with the following: The implementations of a WLPZ via SPR-HYD 4 and BIO-4 will greatly reduce the potential impact to individuals and will preserve breeding habitat. SPR BIO-2 will ensure workers are trained on the identification of this species, so that occurrences can be avoided during operations. Also, SPRs GEO-1, GEO-2, and GEO-3 will prevent ground disturbance during periods of soil saturation, when this species is more likely to be active outside of the WLPZ.

Conclusion

The potential for treatment activities to result in adverse effects on special status animal species was examined in the PEIR. The impact is within the scope of the PEIR because the treatment activities and intensity are consistent with those analyzed in the PEIR. See attachment B for the full analysis of potential listed and non-listed species resulting from SPR BIO-1. With the included SPRs and mitigation measures listed above, the impacts to sensitive species will be less than significant.

Impact BIO-3

There is a potential for the treatment activities to impact designated sensitive natural communities. This impact was examined for this specific project and found to be within the scope of the PEIR. The following sensitive natural community was discovered during reconnaissance surveys:

The *Quercus Kelloggii – Arctostaphylos patula* relationship is listed as sensitive and the *Quercus agrifolia – Quercus kelloggii* is listed sensitive as well. This stand will be protected with mitigation measures listed below.

- Avoid high intensity burning within this area. Limit burn pile density to ~ 17 piles/acre, or ~ 50 ft between piles.
- For all treatments within this mapped area, a minimum of 50 percent relative cover of existing Manzanita and associated native understory vegetation will be retained (evenly or in a mosaic pattern) throughout the treatment area.
- Retain all Oak species not posing a risk to public safety.

Oak woodlands have the potential to be impacted by operations and this was analyzed in the PEIR. With the inclusion of the SPRs listed above this impact will be less than significant. The oak woodland ecosystems are not at significant risk due to vegetation removal, because the size class of trees proposed for treatment are generally less than 6" DBH. Burning could have the potential to disrupt either of these sensitive natural communities, if occurring too frequently. This will be avoided by with the limitations described above. According to Fire in California Ecosystems,

> *"In general, the most frequent fire occurred in grasslands and oak woodlands, with decreasing fire frequencies in chaparral, mixed evergreen, and montane mixed conifer. The least frequent fire occurred in moist, coastal conifer forests…*
>
> *Oregon white oak and California Black oak are fire-enhanced, facultative sprouters…*
>
> *Pre-historically, Oregon white oak woodlands experienced frequent, low-intensity surface fires, many of which were ignited by Native Americans. Mean fire return intervals varied from 7 to 13 years in Oregon white oak woodlands in Humboldt County (Sugihara, Wagtendonk, Shaffer, Fites-kaufman, Thode 2006)"*

Additionally, all riparian habitats shall be protected with the provisions of HYD-4 and BIO-4, through the establishment of a WLPZ buffer. See BIO-4 regarding treatment specifications for riparian habitats. Treatments within this buffer were designed to protect the biological function of these sensitive communities. All riparian habitats are mapped as springs, wet areas, ponds, and Class I or II watercourses. BIO-4 will be implemented within the slope and class dependent WLPZ buffer. See Attachment A.

Impact BIO-4

The treatment activities have the potential to negatively impact wetlands and riparian habitats. With the inclusion of the SPR's 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. The treatment activities and their potential to impact wetlands were assessed in the PEIR and were found to be less than significant after the inclusion of the SPR's listed. The proposed treatment activities are therefore within the scope of the PEIR, because they are the same as those listed in the PEIR.

Impact BIO-5

The treatment activities could result in direct or indirect adverse effects on wildlife corridors because suitable habitat is present in the treatment area. These impacts were found to be within the scope of the PEIR. These treatment activities are also within the scope because they are the same as those analyzed in the PEIR. In fact, it is expected that some wildlife corridors for certain species will ultimately be improved by the treatment activities. By protecting the forest ecosystem as a whole, the habitat corridors, while slightly degraded in the short term will be protected from high intensity wildfire in the future. This may conserve the corridors in the long run and promote a

healthy fire resilient ecosystem. Furthermore, with the inclusion of the riparian zone protections, there will be areas of intact wildlife corridors which connect multiple treatment areas to untreated landscapes.

Impact BIO-6
The treatment activities do have the potential to result in the reduction of habitat or abundance of common wildlife. For this specific project, there is expected to be an increase in habitat for species throughout the treatment area, due to the removal of dead and down, and invasive species. Furthermore, the consequences of a devastating wildfire would be catastrophic to wildlife and their habitat. By taking steps to reduce standing dead and down fuels and improve fire resiliency of existing habitat, the potential for such a wildfire to occur will be greatly reduced. Because of this, along with the included SPRs, the project as proposed will not have a significant negative impact to common wildlife habitat or individuals and a long-term increase and net benefit to habitat and wildlife is expected. The treatment activities are consistent with those analyzed in the PEIR and are therefore within the scope of the PEIR.

Impact BIO-7
This impact does not apply to the treatment areas.

Impact BIO-8
This impact does not apply to the treatment areas.

PD-3.6: GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	LTS	Impact GEO-1, pp. 3.7-26 – 3.7-29	Yes	GEO-1 through GEO-8, AQ-3, AQ-4	NA	LTS	No	Yes
Impact GEO-2: Increase Risk of Landslide	LTS	Impact GEO-2, pp. 3.7-29 – 3.7-30	Yes	GEO-1, GEO-4, GEO-7, GEO-8, AQ-3	NA	LTS	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; LTSM: Less than significant with mitigation; PSU: Potentially Significant and unavoidable; PS: Potentially Significant

New Geology, Soils, Paleontology, and Mineral Resource Impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact GEO-1

There is a potential for the treatment activities to cause erosion and loss of topsoil. This impact was examined in the PEIR and determined to be less than significant. The proposed project is within the scope of the PEIR because the treatment activities are the same as those examined in the PEIR. Furthermore, with the inclusion of SPR GEO-1-8, the impact will be reduced to a level of insignificance. By postponing ground disturbing operations during saturated soil conditions and implementing the erosion control measures outlined in the SPRs the project proponent will ensure the topsoil is protected.

- For SPR GEO-3: It is not practicable to treat all exposed soil with mulch after a prescribed fire which exposes more than 50% of the soil surface within a treatment area. First off, this would defeat the purpose of removing flammable material for the health of an ecosystem, which has been identified as having too much fuel. By adding mulch to an area that was just burned, the project proponent would essentially be putting fuel back on the landscape. Next, these forests are highly adapted to fire, meaning they are equipped to restore ground cover quickly in order to prevent catastrophic top soil loss in the long term. Finally, the scale in which fire is used on a landscape, is such that the degree of soil exposed can be up to 100 or more acres.

For these reasons, it is unreasonable to assume that mulching or otherwise stabilizing all exposed soils treated with fire. The project proponent will only stabilize disturbed soil as a result of prescribed fire, immediately around road watercourse crossings and potentially unstable areas.

Impact GEO-2

The treatment activities would include vegetation removal from steep slopes. An RPF has assessed the treatment areas on slopes over 50% to identify potentially unstable areas. Unstable areas that were identified by the RPF during reconnaissance are mapped. See Appendix C for a map of these potential unstable areas. Operations will not occur within these areas unless reviewed by a licensed geologist.

Impact GEO-2 is within the scope of the PEIR because the treatment activities are the same as those assessed in the PEIR.

PD-3.7: GREENHOUSE GAS EMISSIONS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	Impact GHG-1, pp. 3.8-10 – 3.8-11	Yes	NA	NA	LTS	No	yes
Impact GHG-2: Generate GHG Emissions through Treatment Activities	PSU	Impact GHG-2, pp. 3.8-11 – 3.8-17	Yes	AQ-3	GHG-2	SU	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; LTSM: Less than significant with mitigation; PSU: Potentially Significant and unavoidable; PS: Potentially Significant

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact GHG-1

Use of vehicles/equipment and prescribed burning during treatment activities will result in greenhouse gas emissions. Conflicts with applicable plans, policy, and regulations aimed at reducing GHG emissions may occur due to this project. This 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. Furthermore, by carrying out the project in this way, the goal will be to reduce the likelihood of a catastrophic wildfire from occurring. This type of event would create a massive GHG emission at one time. The controlled release of GHG in small amounts during this project is less impactful than the, all at once, release which is likely to occur during a catastrophic wildfire. SPR GHG-1 is not applicable to the proposed project because the property is not a registered carbon offset property. As such, the requirement to inform reporting under the Board of Forestry and Fire Protection's assembly bill 1504 Carbon Inventory Process does not apply.

Impact GHG-2

Use of vehicles/equipment and prescribed burning during treatment activities will result in greenhouse gas emissions. This 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. SPR GHG-1 is not applicable to the proposed project because the property is not a registered carbon offset property. As such, the requirement to inform reporting under the Board of Forestry and Fire Protection's

assembly bill 1504 Carbon Inventory Process does not apply. Mitigation measure GHG-2 will be applied to reduce the GHG emissions during prescribed fire activity. These measures, such as mosaic burning, low fuel consumption, and retention of LWD/snags will provide for Biochar production, carbon sequestration, and reduced carbon emissions.

PD-3.8: ENERGY RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	LTS	Impact ENG-1, pp. 3.9-7 – 3.9-8	Yes	NA	NA	LTS	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact ENG-1

The impact to energy resources as a result of this project would be the same as described in the PEIR. This impact was determined to be less than significant and unavoidable. The impact is expected to decrease over time as equipment and methods used for vegetation management become more efficient.

PD-3.1: HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	LTS	Impact HAZ-1, pp. 3.10-14 – 3.10-15	Yes	HAZ-1, HYD-4	NA	LTS	No	Yes
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	LTS	Impact HAZ-2, pp. 3.10-15 – 3.10-18	Yes	HAZ-5, HAZ-6, HAZ-7, HAZ-8, HAZ-9	NA	LTS	No	Yes
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	PS	Impact HAZ-3, pp. 3.10-18 – 3.10-19	Yes	NA	HAZ-3	LTSM	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Hazardous Materials, Public Health and Safety Impacts: Would the treatment result in other impacts related to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact HAZ-1

The proposed treatment activities would require the use of fuels and related accelerants, which are hazardous materials. The potential for these treatment activities to cause a significant health hazard was examined in the PEIR and determined to be Less than significant. This impact is within the scope of the PEIR because the treatment activities, associated equipment, and types of hazardous materials used are the same as those analyzed in the PEIR.

Impact HAZ-2

Herbicide application is proposed to control invasive non-native plants/trees, as well as reduce the level of resprouting within fuel breaks. Application will be achieved by ground methods only (no aerial spraying will occur). The target plant will be backpack sprayed, cut and stump painted, or frilled. The potential for treatment activities to cause a significant health hazard was examined in the PEIR. This impact is within the scope of the

PEIR because the types of herbicides and the application methods proposed are the same as those analyzed in the PEIR. With the implementation of SPRs HAZ-5 through HAZ-9, the impacts will be less than significant.

Impact HAZ-3

Soil disturbance during mechanical treatments and prescribed burning have the potential to expose workers, the public and the environment to existing hazardous materials, if present within the treatment areas. This impact was examined in the PEIR and determined to be potentially significant, and less than significant after mitigation. The impact is the same for this project because the treatment types and potential hazardous materials are the same.

Mitigation HAZ-3 will be implemented by the project proponent prior to implementation of mechanical and prescribed fire treatment activities. The landowner shall be consulted as to the location of known hazardous materials on the property and hazardous materials databases shall be searched.

PD-3.2: HYDROLOGY AND WATER QUALITY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	LTS	Impact HYD-1, pp. 3.11-25 – 3.11-27	Yes	HYD-1, HYD-4, GEO-4, GEO-6, AQ-3	NA	LTS	No	Yes
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	LTS	Impact HYD-2, pp. 3.11-27 – 3.11-29	Yes	HYD-1, HYD-2, HYD-4, HYD-5, HYD-6, GEO-1, GEO-2, GEO-4, GEO-5, GEO-7, GEO-8, BIO-1, HAZ-1, HAZ-5	NA	LTS	No	Yes
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	LTS	Impact HYD-3, p. 3.11-29	Yes	HYD-1, HYD-3, HYD-4, GEO-4, GEO-6,	NA			
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	LTS	Impact HYD-4, pp. 3.11-30 – 3.11-31	Yes	HYD-1, HYD-4 HYD-5, BIO-4, HAZ-5, HAZ-6 HAZ-7	NA	LTS	No	Yes

Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	LTS	Impact HYD-5, p. 3.11-31	Yes	HYD-4, HYD-6, GEO-1, GEO-2, GEO-5	NA	LTS	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Hydrology and Water Quality Impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact HYD-1

Ash and debris from prescribed burning could be washed by runoff into drainages and streams and this potential impact was assessed in the PEIR. To prevent this impact, treatment areas are designed to avoid streams and watercourses, while implementing erosion control measures as described in the SPRs. WLPZs and class III watercourse protection measures will ensure adequate filter strips to avoid significant impacts from this treatment activity. See HYD-4 in the SPRs in Attachment A. This impact was assessed in the PEIR and found to be less than significant with the implementation of the SPRs listed above. The treatment activity is within the scope of the PEIR because it is designed the same as what was analyzed in the PEIR. Chaparral is planned to be burned at an appropriate interval to prevent converting this ecotype. Chaparral will be treated in patches to prevent exposing large areas of bare soil within the project area and avoid hydrolyzing the soil. These treatment designs will be approved by an RPF to ensure this impact remains less than significant.

Impact HYD-2

Vegetation treatments will include mechanical and manual methods. WLPZs and class III watercourse protection measures will ensure adequate filter strips to avoid significant impacts from this treatment activity. See HYD-4 in the SPRs in Attachment A. This will significantly limit activities within the WLPZs and class IIIs to lower this impact to a level of insignificance. Heavy equipment shall not be used when saturated soil conditions exist, preventing compaction, soil loss, and sedimentation. Waterbars shall be installed where necessary, as outlined in the SPRs, to prevent sedimentation. This includes, existing roadway drainage structure protection, as well as areas exposed during mechanical treatments.

There is only one small section of Class II within the treatment area, which will receive a WLPZ protection buffer prior to treatment (see HYD-4). There are many class III watercourses throughout the treatment area. Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water. The following protection measures are taken from the Forest Practice Rules and will be implemented for all ELZs:

- Within the ELZ:
    - no new construction of tractor roads permitted;
    - no ground based equipment on slopes >50%; and
    - ground-based operations are limited to existing stable tractor roads that show no visible evidence of sediment deposition being transported into the adjacent watercourse.
    - Retain all pre-existing large wood on the ground within the ELZ that is stabilizing sediment and is necessary to prevent potential discharge into the watercourse.
    - Retain all pre-existing down wood and debris in the channel zone.
    - Retain hardwoods, where feasible, within the ELZ.
    - Retain all snags (except as required for safety) within the ELZ.
    - Retain all countable trees needed to achieve resource conservation standards in 14 CCR § 912.7 [932.7, 952.7] within the ELZ.
    - Retain all trees in the ELZ and channel zone which show visible indicators of providing bank or bed stability, excluding sprouting conifers that do not have boles overlapping the channel zone. Visible indicators of stability include roots that permeate the bank or provide channel grade control.
    - Exceptions pursuant to 14 CCR § 916.9 [936.9, 956.9], subsections (e)(1)(A)-(F) are permitted in any ELZ and channel zone.

Mechanical treatments will most often entail mastication, which provides erosion control innately during treatment. The chips created during this type of treatment will act as a mulch, covering any freshly exposed soil, preventing soil loss during heavy rain events. Erosion control monitoring shall ensure all facilities are functioning and exposed soil is not at risk of delivering to any watercourses. Impact HYD-2 was assessed in the PEIR and found to be less than significant with the implementation of the listed SPRs. The treatment activity is within the scope of the PEIR because it is the same as what was analyzed in the PEIR.

Impact HYD-3
Prescribed herbivory does have the potential to violate water quality standards, but with the inclusion of the SPRs listed above, the impact will be less than significant. WLPZs and class III watercourse protection measures will ensure adequate filter strips to avoid significant impacts from this treatment activity. See HYD-3 in the SPRs in Attachment A. This impact was assessed in the PEIR and found to be less than significant. The treatment activity is within the scope of the PEIR because it is the same as what was analyzed in the PEIR.

Impact HYD-4
The use of herbicide has the potential to violate water quality standards. WLPZs and class III watercourse protection measures will ensure adequate filter strips to avoid significant impacts from this treatment activity. See SPRs in Attachment A. These SPRs pertinent to this impact were designed to prevent herbicide from entering waterways in amounts deleterious to water quality. SPR HAZ-5 requires the project proponent to prepare a spill prevention and response plan prior to beginning any herbicide treatment activities. This will mitigate potential impacts associated with spilled chemicals reaching waterways. Herbicide use will comply with application regulations as per SPR HAZ-6. Use will be coordinated with the County Agricultural Commissioner, and all required licenses and permits will be obtained prior to herbicide application. All herbicide applications will be implemented consistent with recommendations prepared annually by a licensed PCA.

This impact was assessed in the PEIR and found to be less than significant with the implementation of the SPRs listed above. The treatment activity is within the scope of the PEIR because it is the same as what was analyzed in the PEIR.

Impact HYD-5
Treatment activities could cause ground disturbance and erosion, which could directly or indirectly modify existing drainage patterns. WLPZs and class III watercourse protection measures will ensure adequate filter strips to avoid significant impacts from these treatment activities. The SPRs listed above will require waterbar placement where erosion and runoff are highly likely, as well as require repair and maintenance of existing

drainage and erosion control infrastructure. This doesn't mean existing erosion control issues will be fixed, but rather all erosion control devices functioning pre-project implementation shall be maintained.

Impact HYD-5 was assessed in the PEIR and found to be less than significant with the implementation of the listed SPRs. The treatment activities are within the scope of the PEIR because they are the same as those analyzed in the PEIR.

PD-3.3: LAND USE AND PLANNING, POPULATION AND HOUSING

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	LTS	Impact LU-1, pp. 3.12-13 – 3.12-14	No	NA	NA	NA	NA	NA
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15	No	NA	NA	NA	NA	NA

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Land Use and Planning, Population and Housing Impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact LU-1
NA

Impact LU-2
NA

PD-3.4: NOISE

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	LTS	Impact NOI-1, pp. 3.13-9 – 3.13-12; Appendix NOI-1	No	None	NA	NA	NA	NA
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	No	None	NA	NA	NA	NA

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact NOI-1
There are no nearby receptors sensitive to increased ambient noise levels.

Impact NOI-2
There are no nearby receptors sensitive to increased ambient noise levels.

PD-3.5: RECREATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	LTS	Impact REC-1 pp. 3.14-6 – 3.14-7	No	None	NA	NA	NA	NA

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact REC-1
No recreational areas will be impacted by this project.

PD-3.6: TRANSPORTATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact TRAN-1: Result in Temporary Traffic Operations Impacts by Conflicting with a Program, Plan, Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures	LTS	Section 3.15.2; Impact TRAN-1 pp. 3.15-9 – 3.15-10	No	NA	NA	NA	NA	NA
Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses	LTS	Impact TRAN-2 pp. 3.15-10 – 3.15-11	Yes	AD-3, HYD-1, TRAN-1	NA	LTS	No	Yes
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	PSU	Impact TRAN-3 pp. 3.15-11 – 3.15-13	Yes	NA	AQ-1; *See exclusions in discussion*	PSU	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact TRAN-1
NA

Impact TRAN-2
Smoke generated during prescribed burning operations may necessitate the implementation of a Traffic Management Plan (TMP). The need for this will be assessed by the lead agency in conjunction with Caltrans during the preparation of the prescribed burn based on weather, location of burn and orientation to local traffic patterns. This impact was assessed in the PEIR. The impact of this project is within the PEIR because the treatment activity is the same as what was covered in the PEIR.

Impact TRAN-3
This impact was examined in the PEIR and this projects impact determination is the same because the project utilizes the same treatment methods and equipment.

The overall impact was determined to be Potentially significant and un-avoidable by the PEIR. Mitigation measure AQ-1 will be applied where feasible and will, along with the SPRs, reduce the impact. The following mitigation measures listed under AQ-1 will not be applied due to lack in technology and infeasibility at the local level:

- Electric and gasoline-powered equipment will be substituted for diesel-powered equipment.
    - *Currently there are no alternatives available which offer the functional ability to handle the workload required for the treatment activities. Diesel engines are the most efficient and widely available option for completing fuels treatments, particularly with regards to mechanical treatment activities. Furthermore, gasoline engines lack the torque required to complete treatments on steep slopes under extreme loads. This is where Diesel engines have an advantage, allowing treatment on areas which would otherwise be untreatable. Diesel powered equipment also has a greater workload ability, allowing work to be completed faster. This has both an economic impact to the project as well as a reduced duration of air quality offense.*

      Lithium-ion batteries lack the range and charging speed to allow "theoretical" electric powered heavy equipment to complete the job within any sort of real-world efficiency. Because the jobs are so far from any charging station, it would be necessary to have a mobile charging source. That charging source would likely require a gas-powered generator to work (due to the location of the proposed treatments), thus defeating the purpose of the mitigation measure.

      Ultimately, the technology is lacking, both locally and elsewhere, to include this mitigation measure as a feasible option.

PD-3.7: PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Section 3.16.1 pp. 3.16-2 – 3.16-3; Impact UTIL-1 p. 3.16-9	Yes	NA	NA	LTS	No	Yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	PSU	Section 3.16.1 pp. 3.16-3 -3.16-5; Impact UTIL-2 pp. 3.16-10 – 3.16-12	No	NA	None	NA	NA	NA
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Section 3.16.2 pp. 3.16-6 – 3.16-7; Impact UTIL-2 p. 3.16-12	No	NA	NA	NA	NA	NA

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

LTS: Less than Significant; PS: Potentially Significant; LTSM: Less than Significant after Mitigation

New Public Services, Utilities and Service System Impacts: Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact UTIL-1

If the project proponent utilizes prescribed burning, water usage may be required, if the burn goes out of prescription. Also, water may be utilized for dust abatement as described in the SPRs. The potential increased demand for water was examined in the PEIR. The impact is within the scope of the PEIR because the activities scope and duration are the same as those analyzed in the PEIR. The amount of water potentially required was assessed in the PEIR and found to be less than significant and no SPRs or MMs were developed for this impact.

Impact UTIL-2
Vegetation biomass and other material will not be transported off site during operations. All vegetation shall be burned, chipped, or lopped and scattered on site.

Impact UTIL-3
NA

PD-3.8: WILDFIRE

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	LTS	Section 3.17.1; Impact WIL-1 pp. 3.17-14 – 3.17-15	Yes	HAZ-2, HAZ-3, HAZ-4	NA	LTS	No	Yes
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	LTS	Section 3.17.1; Impact WIL-2 pp. 3.17-15 – 3.17-16	Yes	AQ-3, GEO-1 GEO-2, GEO-3, GEO-4, GEO-5, GEO-8	NA	LTS	No	Yes

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact WIL-1
Treatment activities pose a risk of wildfire ignition as well as prescribed fire escaping its control lines. This potential risk was examined in the PEIR and found to be less than significant with implementation of the SPRs. This impact is within the scope of the PEIR because the treatment activities, types of equipment and duration/intensity are the same as those analyzed in the PEIR. The project proponent is responsible for maintaining control lines during all prescribed burning activities.

Impact WIL-2
Steep slopes occur within the project area. The potential exposure for people or structures to post-fire landslides was examined in the PEIR. This impact is within the scope of the PEIR because the treatment activities, types of equipment and duration/intensity are the same as those analyzed in the PEIR. With the implementation of the above listed SPRs, the impact should be less than significant.

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