

Hogback Ridge VTP # 2025-19

Project Specific Analysis and Addendum to the CalVTP PEIR

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Common Terms and Acronyms Key:

RPF: Registered Professional Forester.

SPR: Standard Project Requirements

PSA: Project Specific Analysis

PEIR: Program Environmental Impact Report

MMRP: Mitigation monitoring and reporting program (Attachment A)

MM: Mitigation measures

CalVTP: California Vegetation Treatment Program

CNDDDB: California Natural Diversity Database

CNPS: California Native Plant Society

NACL: Native American Contact List

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 Project Specific Analysis (PSA) is prepared to assess vegetation treatments for the Hogback Ridge VTP covering approximately 431 acres, located in Sonoma and Napa counties.

CEQA LEAD AGENCY AND PROPOSED PROJECT

Napa County will function as the lead agency and project proponent for this CalVTP. Napa Community Firewise Foundation is the implementing entity and is solely responsible for the prescription of all vegetation treatments proposed and commissioned by them, including the implementation of the vegetation treatments, mitigation measures, and Standard Project Requirements (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 treatment types being proposed are fuel breaks and ecological restoration. The treatment activities will include manual treatment, mechanical treatment, herbicide treatment, prescribed burning, and prescribed herbivory. Ongoing maintenance will involve the same treatment types as the initial treatments.

Plan preparing RPF responsibilities: The RPF and Frontier Resource Management, LLC (FRM) have been retained by the project proponent (Napa Firewise), for the preparation of this PSA and all supporting documents attached. This includes identifying watercourses, sensitive species habitat, potential unstable slopes, and other sensitive forest resources in accordance with standard forest practices. The boundaries of mechanical treatments and other higher impact treatments have been designed to minimize impacts to these resources, as well as limit the potential for unforeseen impacts to occur. Nevertheless, there are still site-specific instances which will require adaptive management and RPF oversight during treatment implementation. The preparation of this document and plan does not designate the plan preparing RPF as the responsible entity during treatment implementation. The project proponent will retain an RPF to provide professional advice during treatment implementation.

FRM 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. The Lead Agency 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.

- ❖ *There are many private landowner's within the project area. The project proponent, lead agency, and RPF preparing this plan are not responsible for the conduct of these landowners. The following mitigation measures and SPRs only apply to a project commissioned by the project proponent or lead agency.*

STATEMENT OF PURPOSE

This document serves as the PSA to determine if the project as proposed is within the scope of the CalVTP PEIR and to provide CEQA compliance for the proposed vegetation treatments. Approximately 20% of the project area falls outside of the “treatable landscape” or geographic extent of the PEIR. This area can be classified as non forested areas and intermittent patches of Douglas-fir Mixed Hardwood and Oak Woodland. Excluding Non forested areas from the discussion below, the CalVTP Treatable Landscape boundary was digitally developed at a large scale, which did not allow for high resolution mapping. As a result, areas were dis-included, even though the vegetation is very similar to the surrounding vegetation within the treatable landscapes. These areas need treatment, as they provide fuel ignition and transfer fire to the “treatable landscapes”. The invasion of grasses into oak woodlands and oak savannahs has moved these areas into extreme fire danger, furthering the necessity for preventative treatments.

Due to the similarities of the areas outside of the treatable landscape, the environmental analysis in the PEIR is applicable. An addendum to an EIR is appropriate when a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in a substantially more severe significant environmental impact, consistent with CEQA section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168. In this case there are no revisions, only a change to the geographic extent represented by the PEIR.

This document serves as both the PSA and the Addendum to the CalVTP PEIR to provide CEQA compliance for the proposed vegetation treatments.

VEGETATION TREATMENT PLAN

This Vegetation Treatment Plan does not prescribe treatment specifications for each forested area, but rather gives a brief overview of current conditions and general goals. The project proponent & implementing entity shall consult with an RPF for the development of the treatment prescriptions for each forest type. The RPF preparing this document and designing mitigations, is not responsible for the implementation of the project or its mitigations. The project proponent and lead agency assume full responsibility for following the plan as outlined in this document. Furthermore, the project proponent and lead agency are required to consult with an RPF during implementation as outlined in the California Forest Practice Rules.

Treatment prescriptions and other “forestry services” for all “forested landscapes” must be developed by an RPF as required by Professional Foresters Law; Public Resources Code Sections 750 – 758. Forested landscapes are defined as,

“... those tree dominated landscapes and their associated vegetation types on which there is growing a significant stand of tree species, or which are naturally capable of growing a significant stand of native trees in perpetuity, and is not otherwise devoted to non-forestry commercial, urban, or farming uses.”

“Forestry” is defined as,

“...the science and practice of managing forested landscapes and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing, and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation of mitigation of impacts from forestry activities on watershed and scenic values...”

PROJECT LOCATION

The 431-acre treatment area is situated roughly 4.5 air miles west of the city of Napa, the project is located in Napa and Sonoma Counties, CA. It has the following legal description: Section 1 To6N R06W, Section 6, 7, 8, 15, 16, 17, 21, 27, 28, 33, 34, To6N R 05W, Section 4, 11, 14, 23 , 24 , 25 To5N R05W, Section 36 To7N R06W. It spans from Dry Creek Road in the North, to Highway 12 in the South. MDBM within Rutherford, Sonoma, and Napa USGS 7.5 Minute Quadrangles. The elevation of the entire project area ranges from 118 – 2690 ft above sea level.

CURRENT FOREST CONDITIONS

Three planning units within the project area have been developed. The following forest descriptions are based on initial reconnaissance and are not meant to be a comprehensive inventory of these different stand types. A more in-depth forest assessment should be conducted by an RPF prior to designing treatment specifics.

The Northern Hogback Ridge Treatment Unit is a fuel break and forest restoration treatment unit of approximately 365 acres. This unit consists of two forest restoration treatments and a fuel break treatment along the ridgeline. The entire unit was altered by the 2017 nuns fire, and evidence of this significant disturbance is observed throughout. The following five stand types were observed within the surveyed area

The Admiral Cooke treatment unit is four acres in size and like the Northern Treatment Unit, was affected by the Nuns fire.

The Southern Hogback Ridge Treatment Unit is 61 acres in size and was affected by the Nuns fire like the other treatment units. The following vegetation types are found in surveyable area.

Douglas-fir Mixed Hardwood – 76 acres:

Overall stand health and density is variable due to the Nuns fire. Significant regeneration of hardwoods including Pacific madrone and Bay laurel is prevalent. Tree stocking averages 120 sqft of basal area, with an average diameter of 18.” The fire hazard is moderate – high, specifically within both forest restoration units in the Northern Treatment Unit, emphasizing the need for treatment. Within the stand, the species found are Coast live oak (*Quercus agrifolia*), Douglas-fir (*Pseudotsuga menziesii*), Black oak (*Quercus kelloggii*), Valley oak (*Quercus lobata*), Bay laurel (*Umbellularia californica*), Pacific madrone (*Arbutus menziesii*), Big-leaf maple (*Acer macrophyllum*), White oak (*Quercus garryana*), and Interior live oak (*Quercus wislizeni*).

Redwood Mixed Hardwood – 48 acres:

The Redwood Mixed Hardwood Forest type exhibits variability in overall stand density and sizing, emphasizing the patchy effects of the Nuns fire. The basal area averages 100 sqft and has an average diameter of 18.” Ridgetop stands experienced a much greater degree of mortality and thus regeneration of Redwood, Bay Laurel, and Pacific Madrone. The overall fire hazard is moderate – high. Species found here include Redwood (*Sequoia sempervirens*), White alder (*Alnus rhombifolia*), Bay laurel (*Umbellularia californica*), Big-leaf maple (*Acer macrophyllum*), Interior live oak (*Quercus wislizeni*), Coast live oak (*Quercus agrifolia*), and Douglas-fir (*Pseudotsuga menziesii*).

Douglas-fir Mixed Hardwood High Mortality – 23 acres:

These are Douglas-fir stands which were heavily impacted by the Nuns fire and experienced high mortality. There is 50 sq ft of basal area with an average diameter of 18.” The overall fire hazard in this site is high, due to the overstocked regeneration which consists primarily of hardwoods and Knobcone pine. Portions of this stand contain potential Pallid Bat habitat, this is discussed in greater detail in Impact BIO-2. The predominant species are Douglas-fir (*Pseudotsuga menziesii*), Pacific madrone (*Arbutus menziesii*), Bay laurel (*Umbellularia californica*), Redwood (*Sequoia sempervirens*), Black oak (*Quercus kelloggii*) and Knobcone pine (*Pinus attenuata*).

Mixed Hardwood – 17 acres:

There is a total of 75 sq ft of basal area with an average tree diameter of 14.” The overall fire hazard is moderate. This forest type experiences variability in overall health, with some locations exhibiting greater regeneration and surface fuels which contribute to a greater density of ladder fuels. The species here include Black oak (*Quercus kelloggii*), Bay laurel (*Umbellularia californica*), Douglas-fir (*Pseudotsuga menziesii*), Coast live oak (*Quercus agrifolia*), Pacific madrone (*Arbutus menziesii*), Oregon white oak (*Quercus garryana*) and Toyon (*Heteromeles arbutifolia*).

Oak Woodland – 45 acres:

There is 50 sqft of basal area, with an average diameter of 18.” The overall fire hazard is low due to the lack of ladder fuels and significant ground fuels beyond grass. Species found here are, Coast Live Oak (*Quercus agrifolia*), Bay laurel (*Umbellularia californica*), Valley oak (*Quercus lobata*), Douglas-fir (*Pseudotsuga menziesii*), Black oak (*Quercus kelloggii*), Blue oak (*Quercus douglasii*), and California buckeye (*Aesculus californica*) and Douglas – fir (*Pseudotsuga menziesii*) and White Oak (*Quercus garryana*).

Regeneration – 19 acres:

It is characterized by an extreme regeneration of Hardwoods along with significant overstory mortality. Snag density within this stand averages 40 TPA, and the live overstory basal area averages 40 sqft. The residual overstory trees, specifically in the Southern Treatment Unit, have an average diameter of 20.” Regeneration density is consistently within the low thousands of TPA. The significant regeneration and snags within the overstory as well as steep slopes create an extreme fire hazard. Species found are Bay laurel (*Umbellularia californica*), Coast live Oak (*Quercus agrifolia*), Pacific Madrone (*Arbutus menziesii*) and California Buckeye (*Aesculus californica*).

- The remaining acreage is non-forested cover types such as grassland, vineyards, and chaparral.

TREATMENT GOALS AND SPECIFICATIONS

The Hoback Ridge VTP is proposed by Napa County to improve forest health and reduce the risk of wildfire throughout the 431-acre treatment area. The following are general goals and specifications which will be further developed by the project RPF for each treatment conducted under this VTP. The tree density specifications pertain mostly to the ecological restoration treatment types. Fuel breaks 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
- Create a fuel break for wildfire control lines

General Treatment Specifications for all forest types:

- Select trees for retention that are free from insect and disease infestation and show little to no signs of tree bole instability.
- Damaged trees showing signs of reduced vigor, insect/disease infestation, and/or poor crown health shall be targeted for removal.
- Retention trees may be pruned to a height of 6-12 feet, but the live crown of conifer trees should not be reduced below 50%.
- Limit “high stumps”. Cut trees to 6” above the ground.
- 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.
- 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 at the time of ignition.
- Treat existing dead and down throughout all treatment types but retain LWD > 16” diameter where feasible. The treatment will be aimed at breaking up the horizontal and vertical continuity of fuel. This may entail chipping, masticating, piling and burning, lop and scattering, broadcast burning or any other feasible method described in the PEIR.
- 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 will occur within shaded and non-shaded fuel breaks and were posing a risk to public safety or fuel break infrastructure. Snags shall be inspected by an RPF or Qualified Biologist, for the presence of sensitive species prior to removal.

Treatment Specifications – Chaparral ecosystems:

- Ecological restoration treatments will not be implemented in Chaparral that is within their natural fire return interval.
- Target fire return interval for chaparral ecosystems will be determined based on the results of SPR BIO-5.
- For ecological restoration treatments, a minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent).

Watershed Discussion

The treatment area traverses through seven watersheds: Upper Dry Creek, Upper Calabazas, Lower Dry Creek, Lower Calabazas, Redwood Creek, Nathanson Creek, and Carneros Creek. The two receiving watercourses are the Sonoma creek and the Napa River, both of which flow into the San Pablo Bay.

The 303(d) listed watercourses include Dry Creek and Carneros Creek (Napa County, tributary to Napa River-tidal). The creeks that feed into these watercourses are Carneros Creek, Upper Dry Creek, Redwood Creek, and Lower Dry Creek.

The long-term effect of this project on watercourse health will be positive. Although treatment has the potential to create impacts to water quality over the short term, the included SPRs and mitigation measures will lower them to a level of insignificance. The project will reduce fuels in a planned and controlled way, lowering the risk of severe effects from wildfire. High severity fire causes long term changes to the vegetation and ecosystem, often burning not only the vegetation but organic material in the soil. This removal of vegetation causes reduction in rainfall interception which leads to increased peak flow. Damage to the soil – which can result from high severity wildfire - leads to decreases in infiltration, increased erosion, and sedimentation.

High severity fire also has the potential to significantly reduce riparian vegetation, which leads to increased average water temperatures. Water chemistry changes, which are harmful to aquatic life can also occur. These changes include reduced dissolved oxygen and increased nitrogen, phosphorus, calcium, potassium, and magnesium.

Vegetation treatments, like those proposed in this VTP, reduce the risk of high severity wildfire and their harmful effects to watercourses. With a reduction in fire hazard, fire resilient species will persist and remain vigorous. These species are adapted to low severity/low intensity wildfires. Previous centuries fire exclusion has led to overstocked forests and greater potential for high severity wildfires. Forests that survive a high intensity wildfire are susceptible to beetle infestations afterward, due to their decreased viability and vigor. Preventative treatments aim to reduce initial wildfire hazard to protect these forests from future disturbance.

TREATMENT TYPES

The following treatment types are proposed: Fuel breaks and ecological restoration (see operations maps in attachment C).

Fuel Breaks:

Shaded and non-shaded fuel breaks may be created at a width of 200 feet along the Hogback Ridgeline. 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 understory regeneration. Existing ground fuels, shrubs, and trees < 6" DBH will be chipped, or burned, except where precluded by the SPRs (i.e. within WLPZ or special treatment zone buffers). If the fuel break is comprised of a young stand predominantly under 12" DBH, trees will be retained as prescribed by an RPF. Once cut, all vegetation will be chipped, burned (piled or broadcast), or lopped and scattered. Vegetation that is lopped and scattered shall not be allowed to accumulate greater than 18" above the ground and will be avoided within 300 ft of a structure.

Herbicides may be used within these areas where necessary to prevent invasive and resprouting species. This will ensure the fuel break is maintained. Herbicide use is not permitted within the STZs for sensitive plant species. See attachment C maps and the attached botany report. *Any herbicide use shall comply with SPR HAZ-5, HAZ-6, HAZ-7, HAZ-8, and HAZ-9 as shown in attachment A.* Within fuel breaks, snags may be removed if assessed by an RPF or Qualified Biologist prior to removal. If determined to contain a sensitive species, CDFW will be consulted prior to snag removal in accordance with the applicable mitigation measures listed in attachment A. No more than 10% of the treatment area will utilize a complete fuel break.

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. Following the NUNS fire in 2017, the forest restoration units found within the VTP experienced a loss of canopy cover, along with significant regeneration of mixed hardwood and conifer. This has caused unhealthy conditions to persist along with the buildup of surface, ladder, and aerial fuel loading. Restoration activities will focus on reducing densities of trees, shrubs, and invasive species. The treatments will mimic fire by removing non-fire resilient species and ladder fuels. By removing vegetation in this way, forest openings will be allowed to re-establish in areas that have become overstocked.

Prescribed herbivory, manual, mechanical, and prescribed burning treatments will be utilized throughout the project area. Treatments in these areas will be focused on removing enough ground and ladder fuels to allow broadcast burning without threatening the larger trees and overall canopy health. The main goal being to return the stands to a historical stocking level, allowing a maintenance program to be established. Treatments will vary by forest type and RPF prescription. Snags and LWD will be retained within this treatment area, unless they pose a threat to public safety.

TREATMENT ACTIVITIES

❖ *For all treatment activities: The project proponent is responsible for implementing these treatment activities including the mitigations and monitoring described in this PSA and Attachment A. Containment of any fire used for vegetation treatment is the responsibility of the project proponent and implementing entity. Frontier Resource Management LLC is not responsible for ensuring that the treatments are implemented in accordance with the listed SPRs and Mitigations as prescribed by the RPF in Attachment A. The project Proponent is responsible for assigning this project to an RPF during treatment operations to ensure all forest resources and sensitive environments are protected adequately.*

Non-surveyed Areas

Approximately 91 acres throughout the Hogback Ridge fuel break could not be surveyed due to lack of access and are shown in attachment C maps. Reconnaissance surveys must be conducted prior to treatment in these locations. During this time, the now “non-surveyed” areas will be assessed in a similar manner as the rest of the project and treatment activity/type will be determined and amended into the plan at that time.

Mechanical Treatments

Approximately 255 acres are proposed to be treated with ground based 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 will 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.

1-2 pieces of heavy equipment shall be used to cut and/or masticate small trees and brush. Mostly this will entail utilizing a mastication head to roughly chip target vegetation and disperse onsite. All equipment used outside of an existing road will be tracked. Tracked equipment is the preferred equipment type for forest operations due to even weight distribution when compared to the higher ground pressure caused by single points of contact on rubber-tired equipment. All tracks will be metal except when operating along paved roads, in which case it will be rubber-tracked. Rubber-tired equipment may be used within the confines of an existing road. Specific equipment types may include: A mini excavator with a masticating head, a skid steer with masticating head, or a feller buncher with a masticating head, and tow/tracked chippers. In some cases where larger trees must be removed for public safety, a skidder or a Feller Buncher may be utilized to conduct “whole-tree yarding” to a landing location for processing. This method may include a Cut-to-length (CTL) attachment if manufacturing of limbless logs is desirable. Mechanical treatments remain the most effective way to achieve the project goals and will thus be utilized where feasible.

Manual Treatments

Manual treatments may be employed everywhere within the approximately 431-acre treatment area. These treatments may involve between 3-10 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 a habitable structure.

Herbicide Treatments

Herbicides may be applied throughout the entirety of the proposed project, except within identified STZs. See Attachment C, maps. Application of an herbicide, immediately following initial treatments will reduce the extreme regrowth of the understory (particularly within the fuel break treatments).

Without chemical 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 specified STZs. See Attachment C, maps. All tree and shrub grazing shall follow the limitations defined in Attachment A SPRs. This treatment activity may entail the use of goats/sheep/cattle.

Prescribed Burning

Prescribed broadcast and pile burning may occur anywhere within the 431 acres, except were precluded by the SPRs, specifically unstable areas, WLPZs, and other STZs.

Broadcast burning may be used throughout the treatment area to reduce the surface and ladder fuel continuity. The intensity of this treatment will vary depending on many factors. Slope, weather, and fuel characteristics will dictate the outcome of the burn and will be utilized to determine the burn window. No broadcast burning shall occur until a burn plan is developed (see Attachment A; SPR AQ-2 and SPR AQ-3). In general, prescribed burning during the initial treatments has the potential to be of higher intensity, as the fuel loads are currently very high throughout the treatment area. It is recommended to utilize other treatment methods to reduce fuels loads.

A loader, excavator, dozer, or skidder may be utilized to establish fire lines where hand lines are not sufficient and where mechanical treatment activities are permitted. The burn plan must outline the equipment utilized in further detail.

CalVTP PROJECT INFORMATION

1. **Project Title:** Hogback Ridge CalVTP
2. **Project Proponent Name and Address:**
Napa County
1195 Third Street, Suite 310
Napa, CA 94559
3. **Contact Person Information and Phone Number:** J.R. Rogers, 707-259-8199
4. **Project Location:** West of Napa CA, within Napa, and Sonoma County.

The project is proposed on private parcels in Sonoma and Napa Counties, which are within the following Pacific Land Survey description. It has the following legal description: Section 1 To6N Ro6W, Section 6, 7, 8, 15, 16, 17, 21, 27, 28, 33, 34 To6N R 05W, Section 4, 11, 14 , 23 , 24 , 25 To5N Ro5W, Section 36 To7N Ro6W, MDBM within Rutherford, Sonoma, and Napa USGS 7.5 Minute Quadrangles

5. **Total Area to be Treated (acres)** 431

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), 431 acres
- ☒ Prescribed Burning (Pile Burning) 431 acres
- ☒ Mechanical Treatment, 255 acres
- ☒ Manual Treatment 431 acres
- ☒ Prescribed Herbivory, 431 acres
- ☒ Herbicide Application, 431 acres
- ☒ No Treatment (Non Forested) 52 acres
- ☒ Non-surveyed Area (To be amended post recon) 91 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 may recur every 1-10 years depending on the effectiveness of the initial treatments and the level of vegetation regeneration. It is anticipated that understory 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 - 15 years.

Ecological Restoration Maintenance:

The goal within these treatment types within the historically forested areas 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. Canopy closure around grassy openings that were historically meadow areas may be greatly reduced. This will serve as meadow restoration and grassland conservation.

- ❖ *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 assessments. The project proponent is responsible for maintaining the initial treatment areas.*

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), 431 acres

☒ Prescribed Burning (Pile Burning) 431 acres

☒ Mechanical Treatment, 255 acres

☒ Manual Treatment, 431 acres

☒ Prescribed Herbivory, 431 acres

☒ Herbicide Application, 431 acres

☒ No Treatment (Non Forested) **52** acres

☒ Non-surveyed Area (To be amended post recon) **91** 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 potentially 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 Napa and Sonoma counties. The property is a conglomerate of individually owned private parcels. The land uses within and adjacent to this property are Non forested areas and private parcels.

8. Other Public Agencies Whose Approval is Required: (e.g., permits)

- Smoke management plan will be prepared for BAAQMD prior to any prescribed broadcast burns. Pile burning may require a smoke management plan depending on the number and size of piles being burned.
- A burn permit will be obtained from CALFIRE when required. See SPRs
- LSA agreement with CDFW may be required if working within the channel zone of a watercourse

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 SPR CUL-2, the Native American tribes listed on CALFIRES NACL will be contacted by the project proponent or their representative.

DETERMINATION

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 treatments in proposed project areas outside the CalVTP treatable landscape do not result in substantial changes in the project, no substantial changes in circumstances have occurred, and no new information of substantial importance has been identified. The inclusion of project areas outside the CalVTP treatable landscape will not result in any new or substantially more severe significant impacts. None of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred; therefore, this **ADDENDUM** is adopted to address the project areas outside geographic extent presented in the PEIR.
- ☐ 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

Date

Printed Name

Title

Agency

PROJECT SPECIFIC ANALYSIS

PD-3.2: 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	Yes	AES-2, AQ-2, AQ-3	NA	LTS	No	Yes
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	No	AES-1, AES-3, AD-4	NA	None	No	Yes
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	PS	Impact AES-3, pp. 3.2-25 – 3.2-27	No	NA	AES-3	None	No	Yes

¹NA: 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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact AES-1

Relevant to all impacts listed below, the treatments listed will reduce the effects of devastating wildfire. This will enhance the visual character of this project area by preserving mature trees which would otherwise be eliminated from such a fire.

The potential for short-term degradation of visual character resulting from the proposed treatment activities was evaluated in the PEIR. These treatments will occur on privately owned land that is visible to the public. Small segments of the CalVTP may fall within the viewshed of the Archer Taylor Regional Preserve. Short-term impacts to visual character for these preserves were assessed in this PSA. Within the Archer Taylor Preserve viewshed, vegetation treatments will be light due to the existing density of vegetation and are expected to enhance the scenic character both in the short and long term. The area that is within the viewshed is small and the vegetation community is not expected to experience significant changes with treatment. Understory thinning will occur within existing stands, improving growing conditions for the overstory, which is visible to the public.

The potential for the project to result in a short-term impact to this resource area is within the scope of the PEIR because the treatment activities are consistent with those analyzed in the PEIR. Through the inclusion of the SPRs, where feasible, as outlined in the PEIR the impact will be Less than significant.

Because the impact on the visual resource is less than what would occur during a catastrophic wildfire, particularly in the long term, this subject is negligible.

Impact AES-2

The potential for long-term impact to visual resources as a result of the project was assessed in the PEIR and found to not be applicable. The area that is viewable is small and the vegetation community is not expected to experience significant changes with treatment.

Impact AES-3

The potential for long-term impact to visual resources as a result of the project was assessed in the PEIR and found to not be applicable. The area that is viewable is small and the vegetation community is not expected to experience significant changes with treatment.

CalVTP Addendum for Change to Geographic Extent

The project proponent has determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the viewshed and treatment impacts are consistent with those examined in the PEIR and would therefore not create any new significant impacts.

The inclusion of land that is outside of the treatable landscape presented in the PEIR, is geographically and visually the same as that included in the PEIR, therefore, the impact will be the same and is also within that scope.

PD-3.3: 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

¹NA: 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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes, complete row(s) below and discussion
		Potentially Significant	Less Than Significant with Mitigation Incorporated
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact AG-1

Initial and maintenance treatments will encourage healthier forest conditions by removing competing vegetation and in some cases scarifying the ground, allowing for desirable tree species to seed in. The project area exists within various forest types such as hardwood forest, chaparral, oak woodland, and conifer forest. 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 are intended to 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 chaparral species.

This Vegetation Treatment Plan does not prescribe treatment specifications for each forested area but rather gives a brief overview of current conditions and general goals. The project proponent shall consult with an RPF for the development of the treatment prescriptions for each forest type. Treatment prescriptions and other "forestry services" for all "forested landscapes" must be developed by an RPF as required by Professional Foresters Law; Public Resources Code Sections 750 – 758. Forested landscapes are defined as,

“... those tree dominated landscapes and their associated vegetation types on which there is growing a significant stand of tree species, or which are naturally capable of growing a significant stand of native trees in perpetuity, and is not otherwise devoted to non-forestry commercial, urban, or farming uses.”

“Forestry” is defined as,

“...the science and practice of managing forested landscapes and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing, and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation of mitigation of impacts from forestry activities on watershed and scenic values...”

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, since treatments will be developed by an RPF.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the composition of forestland as defined in public resources code section 12220(g) is essentially the same within and outside the treatable landscapes of this specific project area. The reason for their dis-inclusion is most likely due to low resolution mapping performed on a large scale. This mapping approach failed to include all forestland needing treatment. This includes low density oak woodland and transition zones which still fall within the definition of a forestland according to the California Forest Practice Rules definition listed above. Therefore, there is no change in the impact to forest resources within these areas.

PD-3.4: 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	PS	Table 3.4-1; Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AQ-4, AQ-6, AQ-3, AQ-2, AQ-1	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	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	AQ-4	NA	LTS	No	Yes
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	PS	Section 3.4.2; Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AD-4, AQ-2, AQ-3, AQ-6	NA	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	NA	LTS	No	Yes
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	PS	Section 2.5.2; Impact AQ-6; pp. 3.4-38	Yes	AD-4, AQ-2, AQ-3, AQ-6	NA	PSU	No	Yes

¹NA: 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; SU: significant and unavoidable

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 portion of the 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. 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. With SPRs listed in the table above, this impact is less than significant.

Impact AQ-3

This impact does not apply to the project area. No serpentine rock was identified during field reconnaissance.

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 burns 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. 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. 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.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscape presented in the PEIR, constitutes a change in the geographic extent presented in the PEIR. The air quality conditions as well as the exposure potential present in these areas are the same as those within the treatable landscape. Consequently, the impact will be the same and is within the scope of this PEIR for all of the above listed impacts.

PD-3.5: 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	PS	Impact CUL-2, pp. 3.5-15 – 3.5-16	Yes	CUL-1 through CUL-5, CUL-8	CUL-2	SU	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, 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

¹NA: 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; SU: significant and unavoidable

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?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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 was determined to be less than significant with the inclusion of the above listed 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 will be conducted by a qualified archaeologist prior to treatment activities occurring. 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 the site will be reviewed 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. SPRs CUL-1 through CUL-6 and CUL-8 will be implemented to mitigate potential impact. All information received regarding pre-historical resources and Native American cultural resources will remain confidential.

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.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent of the PEIR. However, the potential archaeological resources and the environmental conditions are consistent throughout the treatment area, both inside of the treatable landscapes and outside due to the close proximity of these two areas. The boundaries of the treatable landscapes have no bearing on the movement or lives of historical or prehistorical societies. Furthermore, the area outside of the treatable landscape will be included in the archaeological records search, survey, and Native American notification, as well as all other applicable SPRs. There is not expected to be a significant change to the potential impacts or resources to invalidate the PEIR. As a result, the land outside of the treatable landscapes is also within the scope of the PEIR.

PD-3.6: 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-4, BIO-5, BIO-7, BIO-9, AQ-3, AQ-4, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-7, HYD-4, HYD-5	BIO-1a; BIO-1b; BIO-1c	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	PS	Impact BIO-2, pp 3.6-138-3.6-184	Yes	BIO-1 through BIO-5 BIO-10 BIO-11 HAZ-5 HAZ-6 HYD-1 HYD-3 HYD-4 HYD-5	BIO-2a	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	PS	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	None	LTSM	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	PS	Impact BIO-4, pp 3.6-191-3.6-192	No	BIO-1, BIO-2, HYD-4 HYD-1, HYD-3	None	LTSM	No	Yes

Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project 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-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	PS	Impact BIO-5, pp 3.6-192-3.6-196	Yes	BIO-1, BIO-2, HYD-4 BIO-4, BIO-5, BIO-11, BIO-10, HYD-1	None	LTSM	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197-3.6-198	No	BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-12	NA	LTS	NA	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	No Impact	Impact BIO-7, pp 3.6-198-3.6-199	No	AD-3	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

¹NA: 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; SU: Significant and Unavoidable

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Pursuant to SPR BIO-1, Frontier Resource Management LLC conducted a data review of project-specific biological resources and a reconnaissance-level survey of the treatment areas. The main goal of these surveys being 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 the 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-quadrant 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 also reviewed for special-status plants and wildlife that could occur within the treatment areas. Species determined to have a high potential for occurrence, based on project specific habitat, were included in the list of potential species.

Reconnaissance-level surveys were conducted within October and November of 2024 and April 2025 to identify and document sensitive resources within the treatment areas. This included aquatic habitat, riparian habitat, and potentially 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. See the botany report within Attachment B for the full analysis. Of those species, those listed below have been located during SPR BIO-7 botany surveys. If additional species are located, they will be recorded and protected as specified in the botany report.

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 1¹. 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 ecological restoration treatment type proposes to retain the large trees comprising the overstory - except were posing a risk to public safety or where threatening overall ecosystem health (as determined by the RPF), through the spread of insects or disease. As a result, it is anticipated that the removal of overstory vegetation within these treatment types will be minimal and will therefore not have a significant impact to potential sensitive plant species. On the other hand, the fuel break treatment type does have a greater potential to impact sensitive plant populations due to the scope of increased vegetation removal.

Low intensity broadcast burning may be used to treat vegetation to accomplish the ecological restoration goals, by returning a fire-adapted ecosystem to its historical disturbance regime. The following is from “Forest Ecology and Management” B.M. Collins et al, regarding a study around the effects of low intensity prescribed fire on understory vegetation:

“This increase in light combined with increased mineral soil exposed in both treatments involving fire, most likely caused by the consumption of litter and duff layers during burning, improved conditions for seed germination and vegetative resprouting on the forest floor. These improved conditions allowed for rapid recovery of understory plants, and most likely explain the lack of significant treatment effects on forb and graminoid cover for any of the three alternatives.” ...

“In fire only units exotic species richness and cover did not change significantly compared to the control”...

*“The two species that showed the most substantial reduction following the prescribed fire treatments were *Goodyera oblongifolia* (rattlesnake orchid) and *Pyrola picta* (white-veined wintergreen). Both of these species are considered late-seral species, meaning they are associated with more closed canopy stands characteristic of later successional stages.”*

Because so much of the project area for this VTP is currently overgrown creating a high fuel hazard, a net increase in species richness over the long run is expected. This is due to the creation of more early successional forest types and reduction in understory density during treatment, which is likely to increase overall habitat diversity. The increase of exotic annual species, which may occur, is a concern. Exotics are known to thrive in freshly disturbed sites due to their increased advantage over other early successional native species. SPR BIO-9 will be utilized to reduce this potential negative impact. That coupled with planned herbicide use on populations of invasives during maintenance treatments should reduce this impact to a level of insignificance. Mechanical treatments will occur along existing roads and within some proposed shaded and non-shaded fuel breaks. The mechanical treatment areas have the greatest potential to impact sensitive plant populations.

As a result of the above analysis, the RPF has determined that SPR BIO-7 botanical surveys are only applicable within mechanical treatments and within a portion of the fuel breaks areas. All mechanical treatment areas will be surveyed along with fuel break areas that intersect serpentine soil types. The botany report will outline the methods in more detail and will be amended to Attachment B once completed.

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 are anticipated to be reduced to a level of insignificance

Special Status Plant Species known to occur within the project area at this time:

Note for all non-listed special status plant species listed below: As listed in Attachment A Mitigation measure BIO-1b, the RPF has the ability to treat within the STZ of the “non-listed” special status species if it is determined to be a benefit to the overall health of the population.

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

Cobb mountain lupine (*Lupinus sericatus*)

CNPS rank 1B.2

Federal: Not listed

State: Not listed

Habitat requirements and description: This species is prevalent in Colusa, Lake, Sonoma and Napa Counties. It can be found on open wooded slopes in broadleaf upland forest, chaparral, and lower montane conifer forest ecosystems. It is a perennial growing 15 – 50 cm. Its leaves are silver to gray green with short appressed hairs, leaves are 30 – 50 mm with 4-7 spoon shaped leaflets and are clustered near the base. Inflorescence is 10 – 30 cm with 12 – 16 mm purple – violet flowers.

Potential for Occurrence: Multiple records of this plant exist within the CNDDDB in proximity to the Northern Treatment Unit. One population, towards Trinity Road, was not relocated during field reconnaissance. The second population was found outside of the treatment area adjacent to a winery. However, a population of approximately 82 plants encompassing 0.8 acres were identified in the southernmost forest restoration unit of the Northern Hogback Treatment area. The plants have an average width of 29 inches and an average height of approximately 18 inches. The surrounding vegetation cover type is chaparral and shrubland with Douglas – fir and hardwood snags.

Protection Measures

- These populations will be protected from damaging effects, through the establishment of a 25 ft STZ. See attachment C operations maps for the location of the population. The project proponent shall implement the following protection measures within the STZ:
 - No vegetation debris piles will be left within the STZ.
 - The residual Douglas – fir snags should be retained as a wildlife habitat feature and not removed.
 - The remaining vegetation and fuels including the hardwood snags and ground fuel will be thinned using hand treatment. These materials will be hand dragged from the STZ, and mechanical treatment is not permitted.
 - Workers will be trained in field identification and avoidance measures of the plant under SPR BIO-2.
 - The contractor will avoid crushing, cutting, or otherwise harming this plant during treatments.

Redwood lily (*Lilium rubescens*)*CNPS rank 4.2*

Federal: Not listed

State: Not listed

Habitat requirements and description:

This species is prevalent throughout Northern California, from the San Francisco Bay Area to the North Coast range. It can be found in plant communities such as Yellow pine and Red fir Forest as well as Chaparral, in gaps or dry soil. The overall plant is smaller than 2 meters, and its leaves are in whorls with generally wavy margins, providing a unique identifying feature when not in bloom. Its inflorescence is ascending to erect with 1 – 40 flowers per inflorescence. The flower is funnel shaped with a perianth parts 4.2 – 6.6 cm in size.

Potential for Occurrence:

This plant was observed in multiple locations in the southernmost forest restoration unit within the Northern Hogback Ridge treatment unit. Due to its local abundance within the treatment area, it can be assumed that any damage to a small number of individuals will not substantially impact on this species as a community.

Protection Measures

- Workers will be trained for the identification of this plant under SPR BIO-2 and will avoid take where possible.

Napa false indigo (*Amorpha californica* Nutt. var. *napensis*)*CNPS rank 1B.2*

Federal: Not listed

State: Not listed

Habitat requirements and description:

This species is prevalent in Sonoma and Napa Counties. It thrives on cooler sights within mixed conifer and mixed oak woodland ecosystems. Growing to between 1 and 6 ft tall, its leaves are approximately 1 inch long and oppositely arranged. The inflorescence is purple and uniquely arranged vertically from the plant usually between 6 inches to 1 foot long.

Potential for Occurrence:

This plant was identified in the CNDDB as occurring “near Lokoya, 1600 ft.” The occurrence was listed as non-specific and needs field work, however, the record intersects the treatment unit. Upon the botanical survey, numerous Napa false indigo were identified utilizing flower and leaf phenology. This plant was found from the northernmost to southernmost end of Northern Hogback treatment unit. Due to its local abundance within the treatment area, it can be assumed that any damage to a small number of individuals will not substantially impact on this species as a community.

Protection Measures:

- Workers will be trained for the identification of this plant under SPR BIO-2 and will avoid take where possible.

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. Those species with moderate to high potential for occurrence, or which are known to occur within 0.7 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, this potential impact 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).

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

Birds

Northern Spotted Owl (*Strix occidentalis caurina*)

Status: FT; ST

Habitat Requirements: Northern spotted owls (NSO) are old growth to second growth forest obligate birds that require permanent water and suitable nesting trees/snags (Zeiner et al. 1990a). Northern spotted owls use dense, old-growth forests, or mid- to late- seral stage forest, with a multi-layered canopy for breeding (Remsen 1978). Northern spotted owl nests are most often found on existing structures (old raptor nest, squirrel nest, red-tree vole nest), or debris piled on a broken topped tree; although, they have been found inside tree cavities.

In evaluating potential NSO habitat, the presence of a nest structure may be more important than the size or species of tree. Successful nest sites have canopy cover immediately above nests exceeding 85%.

The presence of high-quality foraging habitat is also very important. Early seral habitat can provide excellent foraging opportunities for the NSO. Its primary prey in this area is the dusky-footed woodrat (*Neotoma fuscipes*). The NSO breeds from southwestern British Columbia south through western Washington and western Oregon to Marin County, California. The breeding season is between February 1st to July 31st.

Potential for Occurrence: There are 7 documented activity centers within 0.7 miles of the project area. They are NAP0004, NAP0008, NAP0032, NAP0034, NAP0037, NAP0038, and NAP0041. No protocol level NSO surveys have been conducted since these detections were originally made. The project proponent shall assume occupancy at all ACs. There are no activity centers within 500 ft of the project area.

CDFW Consultation Results Regarding NSO Protections:

CDFW was contacted by FRM on 3/27/25 for technical support, regarding protections for these activity centers, as per Mitigation Measure BIO-2a. In the email correspondence, FRM proposed utilizing the U.S Fish and Wildlife document titled “*Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls in Northwestern California*”, updated October 10, 2020. After consultation with CDFW, it was determined that the document can be used for guidance to create seasonal buffers for NSO during treatment. The guidance provides information for determining the appropriate nest

buffer distance based on activities, and their potential increase to the ambient noise level. Shown in Table one below is disturbance distances by action generated sound and pre-project sound level. The Hogback Ridge CalVTP generally falls in the “Natural Ambient” category for pre project sound level. Table two references the equipment that will be used during the project. By taking an average of the decibel level created by the equipment, the action generated sound falls within the “High” category. Thereby requiring a buffer distance of 500 feet. A copy of the email correspondence in its entirety is located at the end of Attachment B for reference.

Project Specific Mitigation measures for NSO ACs:

- There are 7 known Activity Centers within 0.7 miles of the project area, but none of these are within 500 ft of the project boundary.
- SPR BIO-2: Require training on identification of NSO to all workers prior to beginning operations. If an NSO is observed during operations, all treatments shall stop within 500 ft of the location and an RPF shall be notified.
- If NSO ACs are discovered within 500 ft of the treatment area, MM BIO-2a will go into effect with the following provisions:
 - Mechanical treatments, manual treatments, and prescribed burning shall require a seasonal no treatment buffer within **500 ft** of the AC, between February 1st and July 31st.
 - Prior to mechanical, manual, or prescribed fire treatments, the project proponent shall have an RPF or their supervised designee flag an STZ around the discovered AC within the proposed treatment area.
 - Prescribed herbivory and herbicide use shall not require a seasonal restriction.

Table 1. Estimated disturbance distance (in feet) due to elevated action-generated sound levels affecting the northern spotted owl and marbled murrelet, by sound level.

Existing (Ambient) Pre-Project Sound Level (dB) ^{1, 2}	Anticipated Action-Generated Sound Level (dB) ^{2, 3}			
	Moderate (71-80)	High (81-90)	Very High (91-100)	Extreme (101-110)
“Natural Ambient” ⁴ (≤ 50)	50 (165) ^{5,6}	150 (500)	400 (1,320)	400 (1,320)
Very Low (51-60)	0	100 (330)	250 (825)	400 (1,320)
Low (61-70)	0	50 (165)	250 (825)	400 (1,320)
Moderate (71-80)	0	50 (165)	100 (330)	400 (1,320)
High (81-90)	0	50 (165)	50 (165)	150 (500)

Table 2

Equipment Type	Typical Noise Level (dB) at 50 Feet ¹
Chain Saw	85
Dozer	85
Wood Chipper	75 ²
Masticator Head	75

- ❖ The masticator head attachment will have the same decibel level, regardless of equipment type. The equipment utilizing this attachment include Feller bunchers, Skid Steers, or mini excavators.

Bank swallow (*Riparia riparia*)

Status: ST

Habitat Requirements: Bank swallows are a migratory species and can be found in the area in summer months. They are primarily found in riparian and other lowland habitats. They forage predominantly over open riparian areas, but also over brushland, grassland, wetlands, water, and cropland.

Potential for Occurrence: There is a low – moderate potential for this species to occur. The closest known occurrence is mapped generally to Sonoma Creek, this creek is over 0.7 miles from the nearest treatment area. According to the CNDDDB, an egg set was collected on May 23rd 1893. The record is very old and mapped as best guess by CNDDDB. Huichica creek, which falls within the CNDDDB mapped polygon, was surveyed for nests, no evidence of current habitation was found. There is a potential for habitat to be found in other class I and class II watercourses throughout the project area.

Potential Project Impact: Due to the potential habitat within the project area, there may be a low to moderate potential for treatments to impact this species if present. However, with the application of the following mitigations and SPRs, this potential impact will be lowered to a level of insignificance.

WLPZ protections prescribed in HYD-4 and BIO-4 will provide refuge for this species, particularly within their optimum foraging habitat. Furthermore, SPR BIO-2 training for workers will ensure operators are trained in the identification of this species. SPR BIO-10, focused surveys were conducted by FRM during preparation of the PSA and this species was not detected. SPR BIO-12 requiring nesting bird surveys between March-July will further reduce potential impact to this species. Overall, with these mitigations and protection measures, there is not expected to be an impact to this species from the proposed treatment activities.

Mammals

Pallid Bat (*Antrozous pallidus*)

Status: SSC

Habitat Requirements: Pallid bats occupy a wide variety of habitats, such as grasslands, shrublands, and forested areas of oak and pine, but prefer rocky outcrops with desert scrub (Zeiner et al. 1990b). The pallid bat roosts in caves, mines, crevices, buildings, under bridges, and occasionally in hollow trees. Day roosts are located at sites that provide protection from the heat of the day; Night roosts are in more open areas such as porches or open buildings (Zeiner et al. 1990b). Pallid bats feed on a wide variety of relatively large ground dwelling or slow flying insects and arachnids (Zeiner et al. 1990b). Colonies of *A. pallidus*, as with most bats, will typically emerge about 1 hour after sunset, return to roost, and then forage again before dawn. This species specializes in foraging on insects on the ground, versus in the air, by listening for the insect footsteps. The pallid bat is found throughout most of the western U. S. and Mexico.

Potential for Occurrence: There is a low-moderate potential for occurrence of this species. Three bats were captured within the Southern Treatment Unit in October 1998. This record is mapped to the Hogback Ridge CalVTP operations map as a Bio STZ. In addition, 32 bats were found along Huichia Creek in September of 1939, Huichia creek is located near the southern treatment unit. The final record states a bat was observed within 0.7 miles of the Southern Hogback Treatment unit. During field reconnaissance, no specific habitat was observed within the treatment area, such as trees that contain basal hollows, which are ideal for Bat species. However, much of the treatment area was severely affected by the Nuns fire in 2017. This has caused mortality in Douglas fir stands which have the potential for current Bat habitation.

Potential Project Impact: There is a low potential for impact within the project area. SPR BIO-2 training for workers will ensure crews are trained in the identification of this species. SPR BIO-10 will be conducted prior to snag removal in areas with a greater potential for Bat habitat such as the Douglas – fir high mortality stands which are labeled as bio STZs in the Northern Treatment Unit in attachment C. In addition, the CNDDB record of Pallid Bat occurrence is mapped as the bio STZ in Southern Hogback Ridge. If roost trees are detected they will be protected. Overall, with these mitigations and protection measures, there is not expected to be an impact to this species from the proposed treatment activities.

Amphibians and Reptiles

California Giant Salamander (*Dicamptodon ensatus*)

Status: SSC

Habitation Requirements: California *Dicamptodon* salamanders are year round residents of California. In 1989, these salamanders were split into two species – California giant salamander (*Dicamptodon ensatus*) occurring south of the Mendocino County line and the coastal giant salamander (*Dicamptodon tenebrosus*) occurring in the north (Thomas et al. 2016). A hybrid zone exists approximately 6 miles north of Gualala; however outside of this area, the two species are known to be distinct (Thomas et al. 2016). This species occurs in wet coastal forests in or near clear, cold permanent and semi-permanent streams and seepages.

Potential for Occurrence: There is a moderate potential for occurrence within the class I and class II watercourses found within the treatment area. Per the CNDDDB, multiple salamanders were collected in Redwood creek. In 2005, one was collected and one was observed upstream of the treatment area. In 1985, ten were collected downstream of the treatment area. The final observation encompasses the northern treatment unit, with one collected along Mount Veeder road near Lokoya, but its exact location is unknown as the accuracy of the record is mapped to one mile.

Potential Project Impact: The potential for the project to impact this species is low. The watercourse protection measures, particularly SPR HYD-4 and BIO-4 will ensure protection of individuals and critical habitat from damaging effects of treatments. Also, SPRs GEO-1, GEO-2, and GEO-3 will prevent ground disturbance during periods of soil saturation, when this species may wander outside the WLPZ. Any burn piles created within 100 feet of a Class II or Class I watercourse will be surveyed for habitation prior to burning. In addition, workers will be trained in the identification of this species through SPR BIO-2.

California Red-Legged Frog (*Rana draytonii*)

Status: FT, SP, SSC

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 ranid frog will also use upland habitats outside of the breeding season and may be discovered under logs, rocks, and other debris during wet conditions. CRLF were historically believed to prefer only habitats and shorelines with extensive vegetation.

Potential for Occurrence: Per the CNDDDB, one adult was found in August 2019 in a small pond about half a mile from the northern treatment unit. There is a very low potential for occurrence within class I and class II watercourses.

Potential Project Impact: With the following protection measures and SPRs, the potential for this species to be impacted by treatments will be lowered to a level of insignificance. The WLPZ as outlined in SPR HYD-4 and BIO-4 will ensure protection of individuals and critical habitat. Also, SPRs GEO-1, GEO-2, and GEO-3 will prevent ground disturbance during periods of soil saturation, when this species may wander outside the WLPZ. Any burn piles created within 100 feet of a Class II or Class I watercourse will be surveyed for habitation prior to burning. In addition, workers will be trained in the identification of this species through SPR BIO-2.

Foothill Yellow-Legged Frog (*Rana boylei*)

Status: SSC; This species became a candidate for listing on July 7th, 2017. In 2019, CDFW published recommendations to list the FYLF based on a geographic Clade. This recommendation provides protection among populations which greatly need it and avoids unnecessary restrictions in areas where populations are healthy. The only Clade not listed is the Northwest/North Coast Clade. The project area falls within this zone, thus the FYLF is not listed under CESA.

Habitation Requirements: Foothill Yellow-Legged Frogs (FYLF) are associated with lower elevation streams draining the Pacific slope from west-central Oregon to northwestern Baja California. They have declined from over 50% of their historic range. Foothill yellow-legged frogs occupy a diverse range of ephemeral and permanent streams, rivers, and adjacent moist terrestrial habitats over the course of their complex life history. FYLF reproduce in the spring by depositing egg masses into glide habitats within larger watercourses (typically Class I waters). Egg masses are deposited on the down-stream side of cobble size rocks during April-May. Larval forms (tadpoles) rear in watercourses until early fall. Post-metamorphic frogs tend to stay in close proximity to their water source. Adults can migrate down the drainage network to channels that are broad and more sunlit. Seasonal variation in streamflow has a strong influence on life history and movement. Breeding and rearing typically occur in open sunny portions of class I and II watercourses which are gently flowing and low-gradient.

Potential for Occurrence: Per the CNDDDB, there is one record which maps an indistinct location for this species. The habitat consists of a perennial seep, which flows into a small tributary to Dry Creek. The surrounding habitat is chaparral, with patches of mixed evergreen. Dry Creek is over 0.7 miles from the treatment area and the record is mapped to the entirety of the Rutherford quadrant. Given the habitation requirements, there is a moderate potential for occurrence of Foothill yellow legged frog within the treatment area within class I and class II watercourses.

Potential Project Impact: The potential for the project to impact this species is very low. The watercourse protection measures, particularly SPR HYD-4 and BIO-4 will ensure protection of individuals and critical habitat from damaging effects of treatments. Also, SPRs GEO-1, GEO-2, and GEO-3 will prevent ground disturbance during periods of soil saturation, when this species may wander outside the WLPZ. Any burn piles created within 100 feet of a Class II or Class I watercourse will be surveyed for habitation prior to burning. In addition, workers will be trained in the identification of this species through SPR BIO-2.

Conclusion

The potential for treatment activities to result in adverse effects on special status 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 potential impact to sensitive species will be less than significant.

Impact BIO-3

There is potential for the treatment activities to impact designated sensitive natural communities. Riparian areas 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.

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

This impact is not applicable to the treatment area, as no protected wetlands exist within the project area.

Impact BIO-5

According to the PEIR, the treatment activities could result in direct or indirect adverse effects on “wildlife corridors”. In the analysis of the PEIR, wildlife corridors were considered to be uncharacteristically thick chaparral or overgrown forest type, which have been caused by fire suppression over the last 200 years. It is important to note that the vast majority of these overgrown forest types (which are being referred to as “wildlife corridors”) are actually not what most of the wildlife species have evolved to thrive in. Although it is important to have a small portion of thick, dense shrub and/or overgrown forest for small mammals, birds, and other species to utilize as refugia, it is important to note that most large-bodied mammals are disadvantaged in this kind of habitat. Essentially, the type of habitat that a deer requires is far different from a squirrel, and so on. Some of the project area is overgrown with thick chaparral which provides cover for deer to hide but makes poor habitat for feeding and movement. This is also true for a variety of bird and other mammal species that rely on open grassy areas for hunting and foraging. The treatments as proposed will increase early successional habitat which is critically imperiled over a large percentage of The surrounding area. See the forest types map in attachment C. Overall, “wildlife corridors” are overabundant here and not at risk from these proposed treatments. This project – and most similar forest thinning projects in northern CA – will improve wildlife corridors by increasing early successional habitat, which is severely lacking.

Nevertheless, these potential impacts to “wildlife corridors” were found to be within the scope of the PEIR. The proposed 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, will also be protected from high intensity wildfire in the future. This will conserve corridors in the long run and promote a healthy fire resilient ecosystem. Furthermore, with the inclusion of the riparian zone protections, and the fact that not all treatments within this large project area will be able to be completed within a short time frame, there will be areas of intact wildlife corridors which connect multiple treatment areas to untreated landscapes.

Impact BIO-6

There is potential for impact in the interim to habitat and abundance of wildlife during treatments. However, this is not expected to have a substantial impact as listed in the PEIR. There is expected to be an increase in habitat for species throughout the treatment area, due to the removal of dead and down, as well as invasive species and the return of the forests to a historically accurate stocking level. 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, 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. See justification for impact BIO-5

above. The treatment activities are consistent with those analyzed in the PEIR and are therefore within the scope of the PEIR. Additionally, complete fuel breaks, which would cause the greatest reduction in habitat, are limited to no more than 10% of the total treatment area.

Impact BIO-7

This impact does not apply to the treatment areas.

Impact BIO-8

This impact does not apply to the treatment areas.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscape presented in the PEIR, constitutes a change in the geographic extent presented in the PEIR. The habitat conditions and characteristics as well as the biological resources present in these areas are the same as those within the treatable landscape. This is because the areas which fall outside of the treatable landscape are very close in range to the areas within. Generally, these species do not adhere to the “treatable landscape” as it is mapped, which is imperfect and doesn’t contain all forest types or extents. Furthermore, the analysis above and in attachment B looks at all potential species and habitats which are specific to this project as shown on the maps in attachment C. There are no species which are not examined due to the “treatable landscape”. Consequently, the impact will be the same and is within the scope of this PEIR for all of the above listed impacts.

PD-3.7: 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, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, GEO-8, HYD-3, HYD-4, 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

¹NA: 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; SU: Significant and Unavoidable

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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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 will assess the treatment areas on slopes over 50% to identify potentially unstable areas and soils prior to a project. Unstable areas that were identified by the RPF during reconnaissance are mapped. If additional UAs are discovered, they will be amended to the maps. 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.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscape presented in the PEIR, constitutes a change in the geographic extent presented in the PEIR. The geology and soils of the project area not included in the treatable landscape are similar to and will receive the same assessments as areas within the treatable landscape. The reason these areas were not included in the treatable landscapes was an oversight during the PEIR development based on vegetation types and low-resolution mapping. Areas were not dis-included due to soils types in particular. Soil does play a role in the vegetation community structure but is not the sole driver. Things like aspect, slope, and climate also play a major factor in this. For this reason, soil types and geology are represented equally within the treatable and non-treatable landscape and the erosion potential is very similar if not the same. More importantly than the difference between the treatable landscape and non-treatable landscape, is that the treatment activities are the same. These are the main drivers for the potential impacts to soil resources, not the ecosystem or soil types. Consequently, the impact will be the same and is within the scope of this PEIR for all of the above listed impacts within the additional area.

PD-3.8: 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	None	NA	LTS	No	yes
Impact GHG-2: Generate GHG Emissions through Treatment Activities	PS	Impact GHG-2, pp. 3.8-11 – 3.8-17	Yes	AQ-3	GHG-2	PSU	No	Yes

¹NA: 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; SU: Significant and unavoidable

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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. With the implementation of this mitigation measure, the impact was determined to be potentially significant and unavoidable. This is based on a good faith determination made by the board of forestry and does not necessarily indicate an actual significant impact. In fact, the determination seems to be made based on a lack of data rather than an indication of actual proof of significant impact related to these treatments.

The project proponent expects a net benefit to carbon emissions due to the protection and conservation of forest resources associated with these types of treatments. A healthy growing forest is expected to sequester more carbon than a forest starting from secondary succession after a complete stand replacing fire. Likewise, a decadent overstocked forest which has slowed growth significantly, will sequester less carbon than one which is adapted to intermediate disturbances - such as those treatments proposed by this project. Thus, the project proponent disagrees with the PEIR determination that this impact is significant and unavoidable, even when considering the avoided impact of a catastrophic wildfire. Instead, this project is expected to have a less than significant impact on greenhouse gas emissions through the development of a healthy resilient forest, which has been proven to grow faster – putting on more wood every year (i.e. sequestering more carbon). Furthermore, research has proven that disturbance in a forest ecosystem promotes an increased growth rate than one in which there is a significant lack of disturbance. Nevertheless, the PEIR impact will be listed in the table above and the mitigation measure prescribed will be implemented, where feasible.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscape presented in the PEIR, constitutes a change in the geographic extent presented in the PEIR. The wildfire fuel conditions as well as the potential for greenhouse gas released by treatments in these areas is very similar to those within the treatable landscape. The treatment activities will be the same within both areas, which is the main driver for potential impacts to GHG emissions. The areas outside of the treatable landscape which are being added to the project have a lower fuel load over all, since they are generally the grassland/oak woodland forest types. The result will be less treatment of fuel per acre, which would result in a less significant impact than what was assessed in the PEIR. Consequently, the impact will be the same or less and is within the scope of this PEIR for all of the above listed impacts.

PD-3.9: 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

¹NA: 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?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact ENG-1

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

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent of the PEIR. However, the energy use outside of the treatable landscape is expected to be highly similar, if not the same as within it (for this project). This is because the vegetation types, fuel types, and slopes are mostly consistent throughout. Likewise, the equipment used will not vary.

There are some areas being included which contain a large proportion of grassland in contrast to thick timber and chaparral associated with the treatable landscape. In these areas we would expect to see a net reduction in energy consumption during treatments, due to the lower level of fuel loading per acre, when compared to the conifer and oak woodland forests within the treatable landscapes.

PD-3.10: 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

¹NA: 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; SU: significant and unavoidable

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?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 with the inclusion of the SPRs listed above. 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 may be utilized 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 or cut and stump painted. 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 were determined to 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. There is potential for unknown hazardous waste sites within the project area, with the implementation of MM HAZ-3 this impact is reduced to the level of insignificance.

MM HAZ-3 is, as stated in the PEIR, Hazardous Materials, Public Health and Safety section 3.10 Pg 19,

“Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (<https://www.envirostor.dtsc.ca.gov/public/>) and consult DTSC’s Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.”

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the hazardous materials used, the environmental conditions, and the exposure potential is the same as what was analyzed in the PEIR. Furthermore, the regulatory conditions and policies are the same. As a result, the inclusion of land outside of the treatable landscape is within the scope of the PEIR. There is not expected to be a significant change in the potential hazardous impact outside of the treatable landscape.

PD-3.11: 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, BIO-4, BIO-5	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-3, 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-3	NA	LTS	No	Yes
Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides	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

¹NA: 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; SU: significant and unavoidable

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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 to be a low intensity prescribed burn, which is 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 burned in patches to prevent exposing large areas of bare soil within the project area and avoid hydrolyzing the soil. These burn unit 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.

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 class I, II, or III 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. For instance, all existing drainage structures are required to be marked prior to treatment activities to facilitate re-establishment prior to the first significant rain event. 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.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the hydrology, topography, vegetation types and treatment methods are consistent with those analyzed in the PEIR, thus they are also within the scope of the PEIR. Furthermore, the existing environmental and regulatory conditions pertinent to hydrology and water quality are the same. Furthermore, the "treatable landscapes" model does not take into account watersheds and tends to bisect them in many places. This is not a great way to manage forestland since these watersheds should be assessed and treated as a whole. Including these areas will allow the project proponent to positively affect each watershed without artificial boundaries, resulting in an improved function and quality throughout.

PD-3.12: 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

¹NA: 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; SU: significant and unavoidable

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?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact LU-1

NA

Impact LU-2

NA

PD-3.13: 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	NOI-1, AD-3, NOI-2	NA	LTS	No	Yes
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	NOI-1	NA	LTS	No	Yes

¹NA: 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; SU: significant and unavoidable

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact NOI-1

This impact was examined in the PEIR, and this impact was determined to not be applicable for the treatment. Trinity road is within the treatment area. Along this road there is a low density of homes, any treatment occurring near this land use would not cause a substantial impact due to a lack of overall residential density.

Impact NOI-2

Same as NOI-1

CalVTP Addendum: Change to Geographic Extent

The addition of area that is outside the treatable landscapes will not change the determination that this project is within the scope of the PEIR because there will not be a different level of noise associated with the additional area. Also, the exposure to sensitive receptors is analyzed based on the project boundaries which are independent of the treatable landscape shape.

PD-3.14: 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	Yes	AES-1, AES-2, AES-3	NA	LTS	NA	NA

¹NA: 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; SU: significant and unavoidable

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact REC-1

Treatment activities may occur within the viewshed of Archer Taylor Regional Preserve, but this will not affect the recreation occurring at this preserve. The impacts associated with this project are within the scope of the PEIR because the treatment activities and recreational uses are the same as those analyzed in the PEIR.

CalVTP Addendum: Change to Geographic Extent

The addition of areas that are outside the treatable landscapes will not change the determination that this project is within the scope of the PEIR because there will not be a different type of recreational area or use as a result. The treatment types will also be the same, meaning the degree and extent of a potential closure will not change.

PD-3.15: 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, HYD-2, TRAN-1	NA	LTS	NA	NA
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	PS	Impact TRAN-3 pp. 3.15-11 – 3.15-13	Yes	NA	AQ-1; <i>See exclusions in discussion</i>	PSU	No	Yes

¹NA: 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; SU: significant and unavoidable

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact TRAN-1

This impact was examined in the PEIR and this impact was determined to not be applicable for the treatment. Any significant road impediment would occur on Trinity Road, which is a lightly trafficked road serving a small community with a low density of houses and non-forested areas. This area is unlikely to be disrupted by temporary traffic operations.

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 during the preparation of the prescribed burn based on weather, location of burn and orientation to local traffic patterns. It is highly unlikely that a TMP will be necessary, due to the light traffic which occurs around the project area. 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. A traffic plan for this reason is not anticipated, with this specific project. Burning is often suspended on days when weather conditions prevent smoke from exiting the atmosphere quickly.

Impact TRAN-3

This impact was examined in the PEIR and this project's 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.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the land included doesn't contain areas which introduce new regulatory environments or change the impact on transportation as analyzed.

PD-3.16: 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	PS	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

¹NA: 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; SU: significant and unavoidable

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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact UTIL-1

Treatments involve the use of prescribed burning, which may require water usage 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 scope 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.

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

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the land included doesn't contain new areas which when burned, will require a significant increase in the required water used for prescribed fire mop up. Also, the environmental conditions are the same as those assessed within the treatable landscape. As a result, there are not expected to be any new impacts related to UTIL-1 , 2, or 3. The included areas are within the scope of the PEIR.

PD-3.17: 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

¹NA: 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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> 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]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 and implementing entity 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. Low intensity prescribed fire, if utilized, is not expected to have a significant effect on slope stability.

Low intensity burning does not cause the same issues as a high intensity wildfire and should not be analyzed in the same way in terms of the environmental impacts to soil and slope stability. Mechanical treatments on steep slopes may have the potential to cause slope instability, but with the inclusion of

the above SPRs, this impact will be avoided and lessened. All proposed mechanical treatments shall be reviewed by an RPF prior to project implementation to ensure negative impacts to slope stability will be avoided.

The treatment project will reduce the potential for high intensity wildfire, which has a much greater potential impact on slope stability due to the soil hydrolysis which often occurs. Thus, this project is expected to have a net reduction in this potential impact overall.

CalVTP Addendum: Change to Geographic Extent

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the land included doesn't contain new areas which when treated, will cause a significant increase in the impacts listed above. Also, the environmental conditions are the same as those assessed within the treatable landscape. The included areas outside the treatable landscape have the same environmental conditions, vegetation types, erosion hazard ratings, geology, and orientations to the public as within the treatable landscapes. As a result, there are not expected to be any new impacts outside the scope of the PEIR. Consequently, these additional areas are within the scope of the PEIR.

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