Hypericum Eradication at the Mushroom Farm Project-Specific Analysis

An Addendum to the CALVTP PEIR
April 2022
CALVTP ID # 2022-04

SAN MATEO
RESOURCE CONSERVATION DISTRICT

Hypericum Eradication at the Mushroom Farm Project
Project-Specific Analysis

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April 2022
CALVTP ID: 2022-04

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LIST OF ABBREVIATIONS

AB - Assembly Bill
Board - California Board of Forestry and Fire Protection
CAAQS - California Ambient Air Quality Standards
CalVTP - California Vegetation Treatment Program
CDFW - California Department of Fish and Wildlife
CEQA - California Environmental Quality Act
CESA - California Endangered Species Act
CNDDB - California Natural Diversity Database
CRHR - California Register of Historical Resources
dbh - diameter at breast height
GHG - greenhouse gas
NAAQS - National Ambient Air Quality Standards
NAHC - Native American Heritage Commission
NRHP - National Register of Historic Places
NWIC - Northwest Information Center
PEIR - Program Environmental Impact Report
PSA - Project-Specific Analysis
SMRCD – San Mateo Resource Conservation District
SPR - standard project requirement
SR - State Route
USFWS - U.S. Fish and Wildlife Service
USGS - U.S. Geological Survey
VMT - vehicle miles traveled
WLPZ - Watercourse and Lake Protection Zone

1. INTRODUCTION

Background

The California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR) adopted by the California Board of Forestry and Fire Protection (Board) evaluates the potential environmental effects of implementing qualifying vegetation treatments that reduce the risk of wildfire throughout the State Responsibility Area in California. It was designed for use by many State, special district, and local agencies to accelerate vegetation treatment project approvals by finding them to be within the scope of the PEIR. This finding that the proposed treatments are within the scope of the PEIR must be supported by a Project Specific Analysis (PSA).

The San Mateo Resource Conservation District (SMRCD) is proposing a project to treat an approximately 500-acre agricultural area infested with a non-native invasive weed, Canary Island St. John's wort - *Hypercium canariense* – in an area of coastal San Mateo County about 6 miles south of Pescadero (Figure 1). This treatment falls within the scope of the PEIR. This PSA describes the proposed treatment project and assesses the potential impacts of that project along with the applicability and effectiveness of Standard Project Requirements (SPRs) and mitigation measures contained in the PEIR in reducing the potential project-specific impacts.

Project Need and Objective

Hypericum canariense – Canary Island St. John's Wort - is a novel invasive species that threatens agriculture and biodiversity along the California coast while increasing fire fuels. The species has a very limited distribution and only exists in a few naturalized populations. The largest known naturalized population in Northern California is located in southern San Mateo County six miles south of the town of Pescadero. The main patch of the population is located on a single, privately owned parcel of land owned by Baltic Pescadero LLC. For over a decade, San Mateo Resource Conservation District, San Mateo County Agriculture, California State Parks, and the Peninsula Open Space Trust have worked collaboratively to control smaller patches growing on adjacent lands. The large core population of *Hypericum canariense* on Baltic Pescadero property has largely remained untreated and represents a source population that continuously spreads off the property to neighboring conservation lands. The project location is shown on Figure 1.

Our objective is to completely control and remove *Hypericum canariense* within the 500-acre project area. *Hypericum canariense* has spread into dense woody monocultures, making areas of rangeland and row crops inviable. In addition to agriculture, the project area and surrounding properties support important plant communities, including coastal scrub, perennial grasslands, and riparian. *Hypericum canariense*, if left untreated, displaces these ecosystems that are habitat for native species including the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) and California red-legged frog (*Rana draytonii*). The dense and expansive stands of *Hypericum canariense* also increases fuel loading and wildfire risk. Eradication, along with the removal of select small diameter weedy tree species such as eucalyptus and Douglass fir, will increase wildfire resiliency and address tree encroachment into grassland, shrubland, and agricultural areas.

CEQA Responsible Agency and Proposed Project

The SMRCD would be the CEQA Responsible Agency for this project. The SMRCD is seeking CEQA compliance for the proposed project as a later activity covered by the CalVTP PEIR, using its PSA checklist. The proposed treatment type (i.e., Wildland Urban Interface (WUI) fuel reduction and ecological restoration) and the treatment activities (i.e., burning, manual, and mechanical treatments) are consistent with those evaluated in the CalVTP PEIR. In addition, the treatment areas are entirely within the CalVTP treatable landscape.

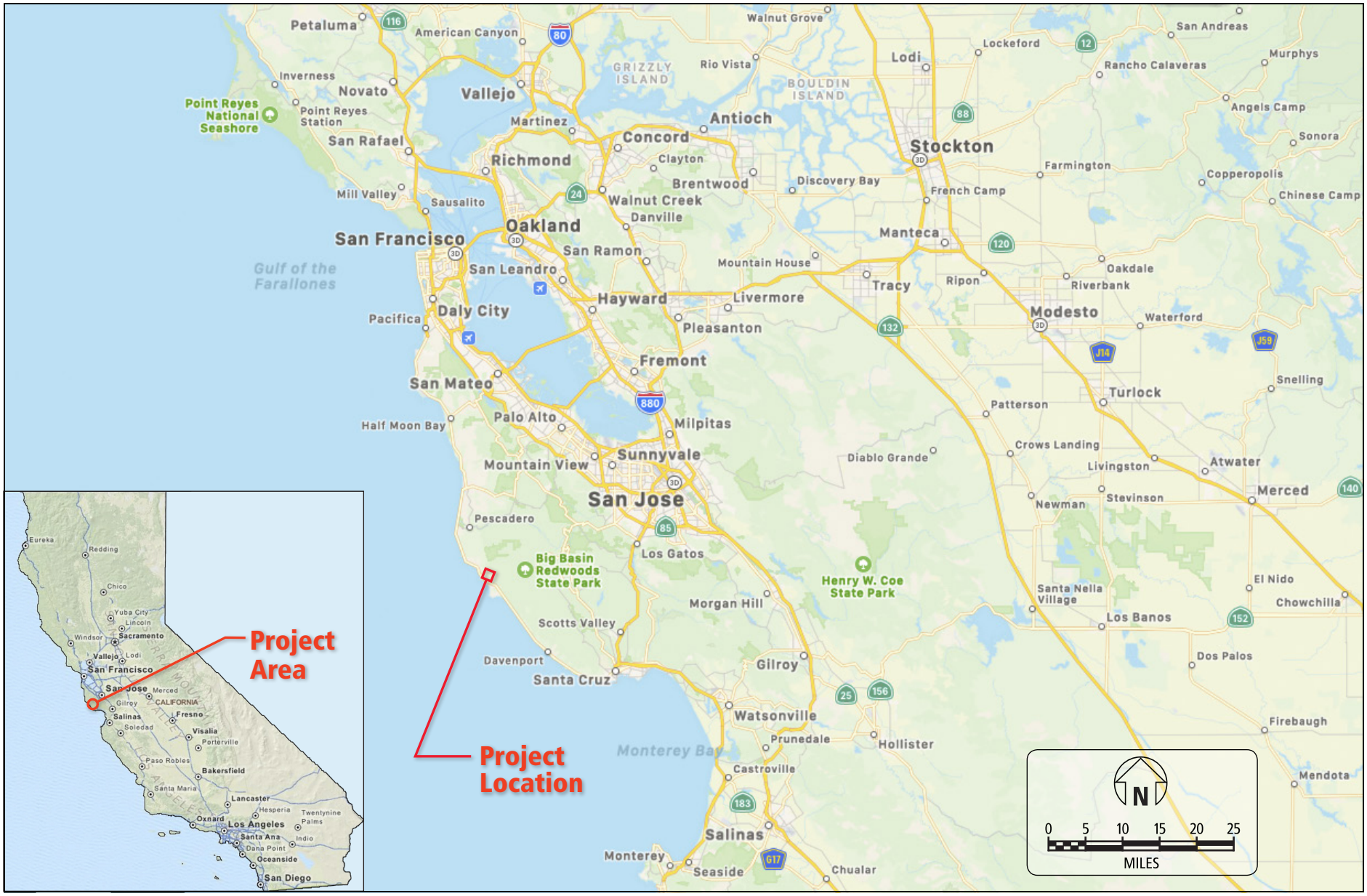

Figure 1

Project Location

Source: TomTom Maps and Grassetti Environmental

Document Purpose

This document serves as the PSA to evaluate whether the proposed project is within the scope of the CalVTP PEIR. As described above, the treatment types and treatment activities are consistent with the CalVTP. Among the other criteria for determining whether a treatment project is within the scope of the CalVTP PEIR is whether it is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the PEIR). If a proposed vegetation treatment project is covered by the evaluation of environmental effects in the PEIR, it may be approved using a finding that the project is within the scope of the PEIR for its CEQA compliance, consistent with CEQA Guidelines Section 15168(C)(2). The project-specific mitigation monitoring and reporting program, which identifies the CalVTP standard project requirements (SPRS) and mitigation measures applicable to the proposed project, is provided in Attachment A.

2. PROJECT DESCRIPTION

PROJECT OVERVIEW

Treatment Overview

This project is focused solely on the approximately 500-acre core patch removal area on the approximately 629-acre Baltic Pescadero LLC (currently operated by The Mushroom Farm) property (see Figures 2 and 3). The proposed treatment of the *Hypericum* population on the Baltic Pescadero property is a three-phase process.

- **Phase 1: Initial Biomass removal**. Much of the current core *Hypericum* infestation area is extremely dense and inaccessible for selective management. Biomass removal is a key element of treating this area in order to create long term access for follow-up treatments and monitoring surveillance.
- **Phase 2: Selective Control of *Hypericum* plants**. After the treatment area is accessible to hand crews and equipment, *Hypericum* plants will be selectively controlled until all adult and juvenile plants and the seedbank is eliminated from the property.
- **Phase 3: Restoration**. After *Hypericum* is eliminated from the property, the property will be restored back to viable rangeland and cropland allowing agricultural activities to resume. This will also increase habitat for native wildlife, as well as help preserve the remaining adjacent coastal plant communities, such as coastal grasslands and scrublands, from further invasion. The property will see a reduction in fire fuels and allow access for owners/tenants.

The total population of *Hypericum* on the property also includes smaller patches of plants that are distributed within native plant communities throughout the larger property (See Figures 2 and 3). These smaller patches will be controlled with selective methods that generally do not require large amounts of vegetation pre-treatment or restoration afterwards. The treatment of these patches is described separately outside of the three-phase process for the core patch removal. Proposed treatment areas are shown on Figure 2.

Phase I – Initial Biomass Removal Treatments

Initial treatment would reduce the above ground biomass of both native coastal scrub and *Hypericum canariense* allowing for treatment access in a relatively open project area. These treatments would focus on above-ground biomass removal only, rather than the control of *Hypericum canariense* root crowns. Timing would be flexible to best support safety and reduce environmental impacts. Three types of initial treatments are proposed for this project: 1) prescribed fire; 2) mastication; and, 3) grading/cultivation.

The primary method for the largest, most difficult to access populations, is prescribed fire. Mastication and grading are proposed in specific areas where prescribed fire is not feasible. Short windows for optimum weather and staff

availability are likely to push the time period for burning over several years. If optimum weather or staffing requirements are not met for prescribed fire, mastication would provide similar results in the major areas planned for treatment and it is the proposed secondary option for biomass removal. Grading would be restricted to areas that have been previously cultivated and that are being restored to crop production. The project area has been divided

into nine management units for treatment purposes (See Figure 3). Each of the units has a priority management treatment for biomass removal based on terrain, accessibility and environmental sensitivity.

Prescribed Fire

Prescribed fire for large scale biomass removal in the densest areas of *Hypericum* can be planned for effective vegetation removal while reducing impacts to native plants and wildlife. The benefits of prescribed fire include;

1) Reduction of high accumulations of vegetation and fire fuels;

2) Decreasing the risk and severity of future wildfires;

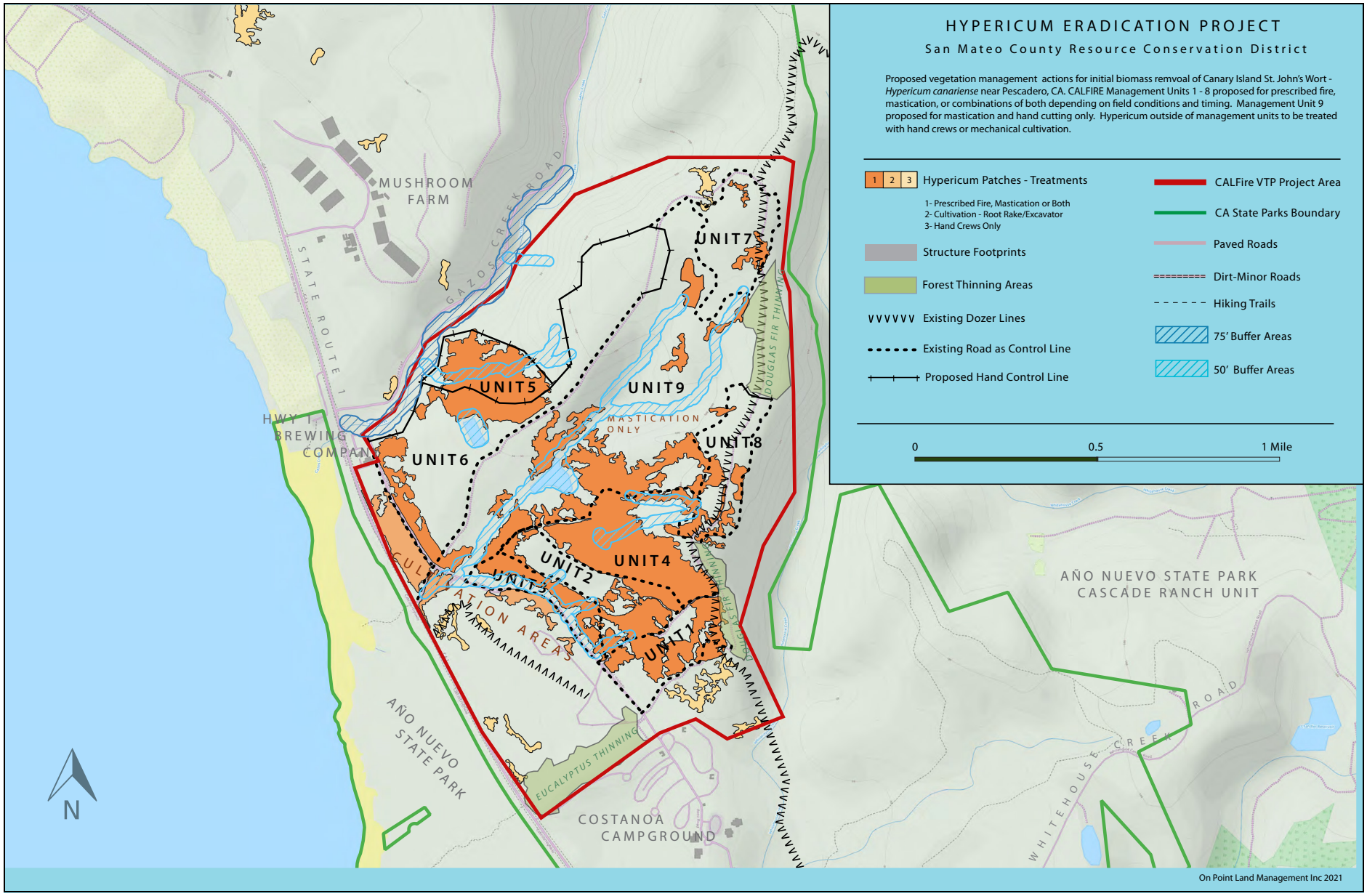

Figure 2

Project Management Units

Source: On Point Land Management, Inc.

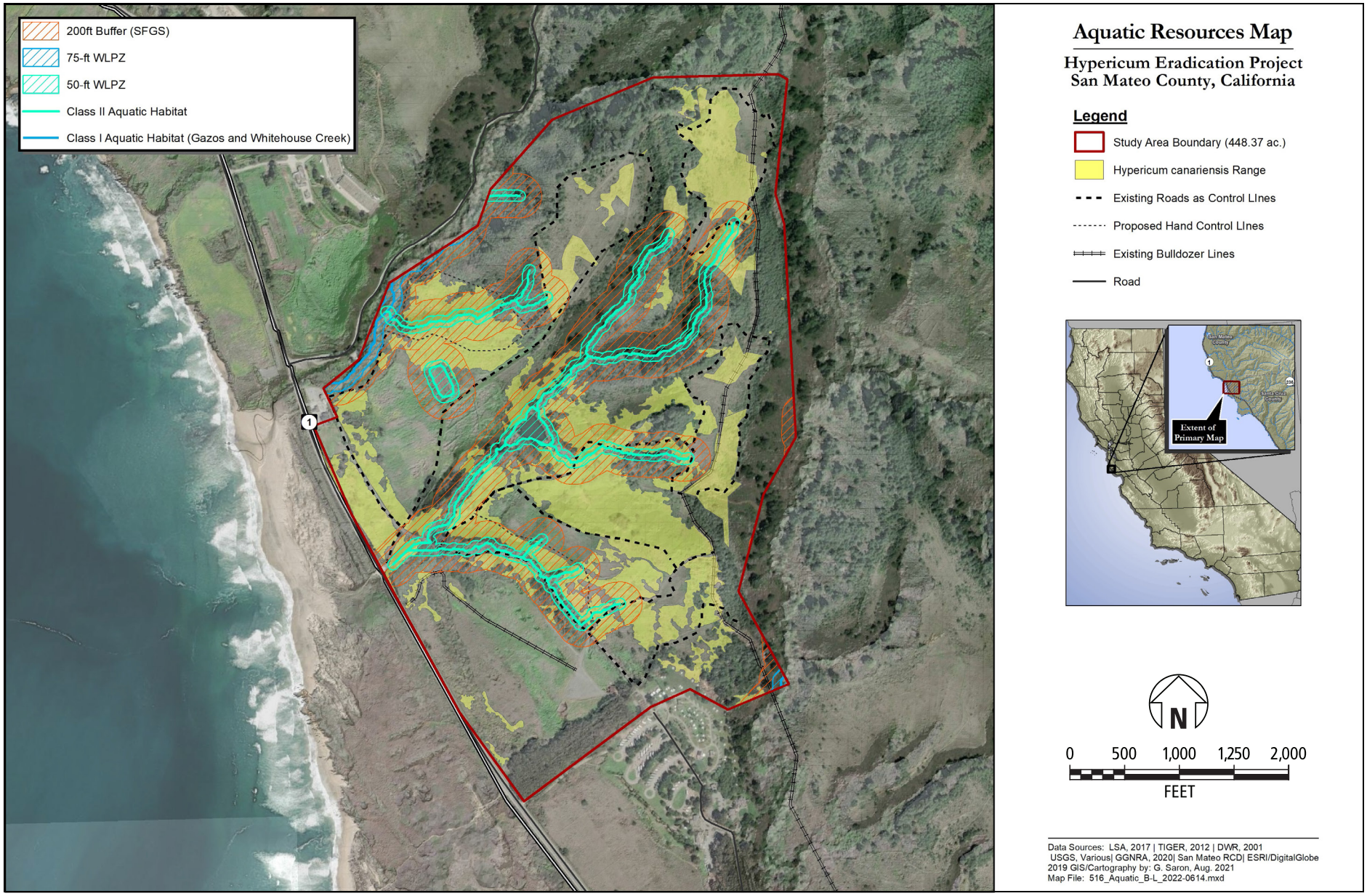

Figure 3

Aquatic Resources

Source: Grassetti Environmental and Vollmar Natural Land Consulting

3) Reduced loss of life and property;

4) Control of invasive species and weedy native species such as Douglass fir trees that encroach into grasslands in the absence of fire;

5) Enhancement of native species reproduction and establishment;

6) Restoration of a natural process that benefits nutrient cycling and soil enhancement;

7) Lowest cost large scale biomass removal process; and,

8) Reduced soil disturbance.

Prescribed fire would be conducted under strict conditions defined in a written plan. It would be planned for optimum time periods when vegetation removal is effective while negative consequences to native plants and wildlife can be minimized.

Prescribed fire is accomplished by breaking up the treatment landscape into manageable sized burn units. Factors such as existing road and trail infrastructure, slope, aspect, water bodies, vegetation, and nearby structures are considered in developing safe and manageable burn units. To safely isolate one burn unit from another or the nearby untreated landscape, they are broken up by the creation of fire control lines. The control lines make use of existing roads and trails where possible and are "plumbed", i.e. CalFire would run a hoselay along it with laterals to moderate fire behavior, extinguish spots and slop overs and provide for the safety of firefighters. The hoselay is pumped by a Type 3 wildland engine and may be supported by a "pumpkin" or snap tank or similar water storage device and serviced by a water truck depending upon nearby water supply

After protective measures have been taken to safely isolate the burn units from the untreated landscape, the prescribed fire is ignited and occurs over a defined period of time depending on the size of the area, weather and vegetation type. After the fire completes the task of burning out the management unit, fire crews would take steps to mop up the fire perimeter 50, 100, 200 feet in depending upon resources and conditions. The prescribed fire continues to be staffed or actively monitored the first night after ignition. Generally, after it has burned down sufficiently and at the discretion of the Incident Commander it is put in "patrol status" where is checked periodically until it is declared out. Once the fire is completely extinguished, restoration measures such as installing erosion control materials repairs any damage caused from the pre-treatment phases.

Prescribed Fire Treatment Activities

Prescribed fire requires certain landscape scale vegetation pre-treatments to be installed to allow the burning of the planned areas while also offering safety backstops if conditions change. For this project, pre-treatments would require the creation of fire control lines to define each burn unit. Hand-crew limbing of lower tree branches, removal of select small diameter trees and other ladder fuels will occur in and around the burn units. Hand-crew and mechanical vegetation treatments to change the arrangement of vegetation and reduce the height and density of the fuel along control lines provides firefighters a safe place to hold the fire line and reduce the fire activity along the edge. In larger units check-lines would be installed to allow firefighters to cut off the fire if conditions become unfavorable. These are smaller than control lines and are usually installed by hand.

Vegetation pre-treatments may or may not be necessary to promote the target vegetation to burn at high enough intensities to result in biomass removal. These activities focus on mechanical treatments for broadcast burning of the actual target vegetation to crush or kill plants several months before the planned prescribed fire. Treatment methods would include hand crews with chainsaws or potentially a tractor mounted cutting attachment such as a rotary disc mulcher. These activities result in dead and dry vegetation that amplify the flammability of the target vegetation so it will burn sufficiently. These treatments may also allow an increased work window that would allow work in wetter months that would reduce the risk of escape and spot fires.

Demonstration Test Fire

As a novel weed, the burn characteristics of *Hypericum canariense* are currently unknown. Understanding the fire characteristics of *Hypericum* will be important to determine 1) if, how and when *Hypericum* can burn to carry a sufficient prescribed fire event and 2) how will *Hypericum* recover from crown sprouting and seed flushes after the prescribed fire. Since *Hypericum canariense* originates from a fire prone ecosystem on the volcanically active Canary Islands, it is assumed to be fire-adapted and capable of recovering from a fire event. Recent wildfires in the region during the summer of 2020 have also verified that *Hypericum* is capable of recovering from a fire event.

More important for this project is how well Hypericum will carry a fire in what types of environmental conditions. Prescribed fires are typically conducted during the cool winter and spring months when fire can be more easily controlled than during the hot and dry summer and fall seasons but actual timing would depend on specific weather conditions when the vegetation is susceptible to burning and can occur anytime during the year. The target vegetation for a prescribed fire must be capable of burning at a sufficient intensity during these cooler conditions to be effective. Since Hypericum is a novel weed with unknown burn characteristics, some experimentation is necessary to determine how and when Hypericum can carry a sufficient prescribed fire.

A test fire is a very small burn that is conducted immediately before the full prescribed fire event to test and tune the conditions necessary for the larger burn. CalFire maintains a Go/No-Go Checklist that considers temperature, wind, and smoke behavior, as well as other factors to determine whether or not to conduct the controlled burn after the test fire. Test fires should be conducted under representative conditions of the full prescribed burn with results documented. The purpose of the test fire is to verify that the prescribed fire behavior characteristics will meet the planned management goals.

Vegetation Pre-Treatment

If Hypericum cannot burn under the planned environmental conditions, pre-treatments may be necessary. Prescribed fire pre-treatments are mechanical treatments to the standing vegetation to promote flammability. These could include hand/mechanical vegetation removal or cutting of the top portions of the plant where the cut portions are piled back onto the target vegetation. The portions of uprooted and cut vegetation is then allowed to dry cure which increases the overall flammability of the project area vegetation so it can carry a prescribed fire of sufficient intensity to burn all the target vegetation. The vegetation pre-treatments proceed the prescribed fire timing from several months to a year prior to the planned prescribed fire event.

Fire Control Lines

Where feasible, existing roads and trails within the project site will be used as fire control lines. This existing infrastructure may require improvements including reduction of vegetation along the lines as well as removing low growing vegetation in the control line to create a contiguous line of bare mineral soil. Vegetation removal would be made to the extent where prescribed fire events can be safely contained. Improvement of control lines may be accomplished through the mechanical means such cutting of vegetation with masticators, tractor-mounted hydraulic mowers, or hand crews with chainsaws or weed whips. Creating bare mineral soil in the control lines where it does not exist can be done with hand tools such as McLouds, shovels, rakes, hoes or with heavy equipment such as a bulldozer.

In some instances, burn units will require the creation of new fire control lines outside of existing infrastructure. These lines would be created with the same general mechanical methods described above. The size and shape of the fire control lines will depend on the height and density of vegetation, location, position in the landscape, and the type of equipment used to construct them.

Vegetation Preparation for Prescribed Fire

Vegetation preparation is designed to reduce fire intensity near fire control lines or help protect sensitive areas from accidental ignition. Preparation for prescribed fire may include the removal of live or dead tree limbs to 10 feet above the ground in perimeter areas of each burn unit, the removal of dead or dying trees that pose a fall hazard to workers or risk crossing a fire control line, and the cutting of low shrub vegetation near trees to prevent crown fire and spots in

Monterey pine and Eucalyptus forests. Vegetation preparation is done with hand crews using chain saws and weed whips or with tractor mounted cutting attachments.

Mop Up

Mop up is when firefighters extinguish remaining burning material near the control lines. Once ignited, large pieces of wood, stumps or other flammable materials may continue to smolder and burn after the prescribed fire is complete. Physical process in mop up may include cutting vegetation with chainsaws, moving debris to safely isolate them, and using hand tools (and/or water) to stir up and extinguish burning stumps or other hot spots.

Post- Fire Rehabilitation

Post-fire rehabilitation is the process of decommissioning and winterizing fire control lines or other soil disturbances to prevent soil erosion. Depending on slope, soil type and remaining vegetation, decommissioning usually entails the installation of water bars with hand tools or a bulldozer, the redistribution of duff and woody debris back onto previously cleared fire control lines with hand crews or tractors, and the installation of temporary erosion control materials with hand crews. Erosion control materials may or may not be necessary depending on site conditions. Minimal erosion control measures may include the installation of coir or rice wattles to more extensive methods such as erosion control blankets and hydroseeding.

Pile Burning

A hybrid method for biomass removal may be used with pile burning. Pile burning is a method of biomass disposal that uses fire to eliminate piles of dried plant material. Mechanical equipment and hand crews cut vegetation and pile it in areas to be burned at a later time after the material has cured dry. Burn piles vary in size from 5 to 10 feet in diameter and 4 to 6 feet in height. Piles can be constructed of any vegetative material, covered (to keep dry) and burned when conditions are wet and safe. All burn piles must be extinguished at the end of the day per CAL FIRE San Mateo policy.

Pile burning can impact soils directly underneath the pile due to excessive heating so these areas must be restored. The long and prolonged heating in a pile burn can create a nutrient flush following the burn where invasive plants can out compete native species. To restore the burn pile areas after burning, the burn pile footprints may be reseeded or replanted with native container plants or grass plugs.

Summary of Equipment

This component of the project proposes the use of the following equipment:

- Type 2/3 Dozer for fire control line construction. Type 3 – 100-150 hp, up to 20,000 lbs; Type 3 – 150-250 hp, up to 40,000 lb. Ground pressure 6-8 psi typical.
- Chainsaws and/or other mechanical and hand tools for vegetation cutting and ground clearing.
- Haul vehicles for equipment/materials hauling. GVWR up to 80,000 lbs limited to roads.
- Misc. pickups and vans for crew support

Duration of Treatments

Prescribed fire treatments within each burn unit would take place in a single day. Mechanical preparation time for each burn would be based on equipment used but generally take several days to a week per burn unit depending on equipment and staff availability. The mechanical pre-treatment of the vegetation would proceed the fire by several months or up to a year before the planned burn. Short windows for optimum weather for prescribed fire and staff availability are likely to push the time period for burning over several years.

Biomass removal methods described below would be substituted for any areas that cannot be burned in a timely manner.

Mastication

In project areas where prescribed burning is not feasible, brush cutting with a mastication machine is the proposed alternative. Unlike cutting, mastication machines cut, grind and mulch the vegetation into a relatively even, targeted chip size. Mastication of mixed species of trees and brush still results in a relatively even chip size after completion unlike other machine mowing methods that often leave a wide variety of debris sizes. The goal of mastication, like prescribed fire, is to open up access to the project site where further control measures can be implemented safely while minimizing soil disturbance.

Mastication machines are very specialized mechanical tools for large scale brush removal and forestry preparation. They tend to use specialized cutting heads that need very large tractors (100-500 hp) to run efficiently though smaller versions are available for small skid-steer style tractors or pull-behind units for wheeled tractors. Mulching heads are often paired with purpose-built tractors that are designed exclusively for efficient brush and tree removal tasks in forestry and rangeland management. They can handle any woody material including trees. Heads generally have additional hydraulic positioning aids allowing mowers to access the steepest and most difficult terrain.

Treatment after brush removal is typically a fine, evenly disturbed mat of wood chips left on the soil surface. The process starts with an initial pass through the vegetation that cuts it to the ground. The operator then makes multiple passes through the same swath to obtain the target chip size. The number of passes over the same swath depends on the target chip size. Since multiple passes are made by driving over cut vegetation and chips with a low ground pressure (4-6 psi) tracked machine, very little disturbance or compaction occurs to the underlying soils when timed appropriately outside the wet season.

Mastication is a relatively straight forward process. No control lines or other pretreatments are necessary. The structure of the target vegetation and the slope steepness are the main limiting factors to the process. The skill of operator and type of equipment used would ultimately determine the limitations to mastication on this project site. Boom mounted Forestry masticators can reach vegetation from roads and benches on areas up to a 90-degree slope.

Summary of Equipment

This component of the project proposes the use of the following equipment:

- Skid steer and mulching tractors. 100-400 hp. 15,000 – 45,000 lbs. Ground pressure 4-6 psi typical.
- Haul vehicles for equipment/materials hauling. GVWR up to 80,000 lbs limited to roads.
- Misc. pickups and vans for crew support

Duration of Treatments

The rate of production for mastication is directly relational to the size of the equipment and the skill and experience of the operator. Depending on equipment used, mastication of the entire site could take several weeks to several months to complete.

Cultivation and Grading

In portions of the project area that would not be restored to native vegetation and rangelands, but rather restored to croplands, digging equipment may be the preferred alternative to burning or mastication. These historically cultivated areas are generally flat, nearby to existing infrastructure, and have been overtaken by *Hypericum* and other weedy species after becoming fallow.

Root plows or brush rakes are the most locally common type of mechanical ‘digging’ tools for brush removal projects but standard flat bladed bulldozer blades can also be effective. Plows and rakes use an array of steel ‘teeth’ or tines to penetrate the soil 5-10 inches and grab below ground plant roots. Rakes have lots of teeth and plows have just a few but they do essentially the same job. Root plows are typically pulled behind a tractor versus brush rakes which are fitted over or in place of the straight blade of a tracked bulldozer. The principal advantage of these brush removal

tools is they generate less soil disturbance than a straight blade or bucket of a bulldozer and can be used to 'rake' up the displaced vegetation after removal. Bulldozers with flat blades can also be used in areas but tend to create deeper soil disturbances and often require later raking to level the areas and remove the vagrant woody debris.

All digging, grading and raking processes produce some degree of soil disturbance. The total depth and degree of soil disturbance will depend on factors such as equipment type, treatment vegetation composition, soils, slope and weather during the treatment process.

Summary of Equipment

This component of the project proposes the use of the following equipment:

- Farm tractors, Skidsteers, bulldozers or excavators. Sizes and types vary widely. 50-400 hp. 10,000 – 50,000 lbs. Ground pressure 4-8 psi typical for tracked equipment and 15-30 psi for wheeled equipment.
- Haul vehicles for equipment/materials hauling. GVWR 15,000 - 80,000 lbs limited to roads.
- Misc. pickups and vans for crew support

Duration of Treatments

The management units proposed for conversion to cultivation are relatively small, flat and accessible. Production rates would vary by the size of the equipment used and operator skill. Treatments of the proposed cultivation areas should be completed within 1 month.

Phase II - Maintenance Treatment and Satellite Patch Control

Maintenance Treatment

Following the first project phase of biomass removal, *Hypericum* and other woody perennial plants will resprout and recover in the project area. Selective methods are necessary for isolating target weeds from rangeland vegetation and eliminating them from the site. The preferred method for *Hypericum* control is the selective use of herbicides on resprouting individual plants. This two-stage treatment process allows for the clear separation of the target weed from desirable resprouting rangeland vegetation. Sufficient time will be necessary to allow *Hypericum canariense* to regrow to a suitable size for retreatment. Sufficient stem and leaf area is necessary to deliver an effective herbicide dose to the target plant which may require several months to a year of regrowth, depending on environmental conditions.

In addition to crown re-sprouting, seedling germination will also be necessary for control throughout the project timeline. Seedling control may be necessary immediately after initial biomass removal or in future years depending on the actual method of biomass control implemented at each project location. The preliminary biomass removal methods are consequential on the capacity for seedling emergence. Fire and brush raking/grading are likely to promote massive seedling flushes emergence immediately following the burn or grading when sufficient moisture is available for germination. Mastication provides a protective bed of thick mulch that can suppress seedling emergence until the mulch breaks down in later years, depending on the seedling species.

Hand pulling, though labor intensive, may be an option for addressing seedlings, particularly around cropland areas. Hand pulling would be a way to reduce herbicide usage. Depending on available resources, this method could potentially be prohibitively expensive.

Cut stem, basal bark and other low-volume methods are good treatment options when extreme selectivity is required. Directed foliar applications of herbicide are the most practical and established method for the large-scale management of crown resprouting *Hypericum canariense* shrubs at scales predicted for this project. Wider scale broadcast herbicide applications may be practical for post-burn and post-grading treatments for seedling control. All three of these herbicide methods are likely to control resprouting *Hypericum* and seedling flushes, depending on the proceeding biomass control methods in various parts of the project area.

Backpack, UTV, tractor or truck mounted herbicide application equipment is appropriate for treatments. Terrain and access should match the limitations of the application equipment. It is assumed a combination of low-pressure wands, booms or boomless equipment would be used for the herbicide treatments of *Hypericum canariense* in the biomass removal areas.

Summary of Equipment

This component of the project proposes the use of the following equipment:

- Hand crews using backpack and hand sprayers for crown resprout control of and crews using backpack and hand sprayers for crown resprout control of *Hypericum*.
- ATVs/UTVs/Pickups with larger sprayers for crown resprout and seedling control of *Hypericum.* Size and type vary widely, from 500 – 4,000 lbs. ground pressure and 2-20 psi for wheeled equipment.
- Haul vehicles for equipment/materials hauling. GVWR 10,000 - 15,000 lbs. or greater limited to roads.
- Misc. pickups and vans for crew support.

Duration of Treatments

Selective treatment of resprouting root crowns and seedlings will be the longest duration component of the project. Herbicide and hand work crews will be visiting the site multiple times throughout the year for up to 10 years following the initial vegetation removal activities.

Satellite Patch Control

Smaller patches and individual plants are growing throughout relatively open grassland and dense coastal scrub environments surround the dense, core *Hypericum canariense* area. Accessible plants can be treated by hand crews or small mechanical equipment. Herbicide spot treatments would be made with hand crews with backpack sprayers or small UTV/ATV mounted ground sprayers. Mechanical control can be accomplished with small digging implements such as a compact excavator with a small bucket that can dig out root crowns individually.

Hypericum canariense growing in inaccessible scrub areas may require mechanical removal of natives or cutting access paths for crews to reach the plants since much of the vegetation is impenetrable to humans. To reach inaccessible plants, hand crews would need to use hand held cutting equipment such as chainsaws or brushcutters to cut trails to *Hypericum* sites. Alternatively, smaller mechanical cutters could also be used, depending on slope and vegetation density. All cutting would be relatively superficial to the intact coastal scrub vegetation. This heavy pruning would allow access without creating much permanent disturbance or damage to the intact vegetation.

In instances where access is very difficult, alternative pesticide application methods may have merit. Low volume and cut stem herbicide methods use relatively higher concentrations of herbicide with lower volumes of carrier (water or oil). This allows crews to treat more plants with less volume of mixed herbicide. Since the weight of water is approximately 8.4 pounds per gallon, carrying water by hand to cover 500 acres of backcountry habitat would potentially benefit from alternative herbicide methods.

Summary of Equipment

This component of the project proposes the use of the following equipment:

➢ Hand crews using chainsaws, brushcutters, hand saws, and loppers to cut trails in native vegetation to access Hypericum sites.

➢ Ride-on, remote control or ride-in small mowing machines to cut access trails to reach Hypericum sites. 20-50 hp units, 1,000 – 5,000 lbs., rubber tracks with low ground pressure ~ 2-3 psi.

➢ Compact excavators for digging up small patches of Hypericum. 10-60 hp. 2,500 – 12,500 lbs. 4- 5 psi ground pressure typical.

➢ Backpack and hand herbicide sprayers for crown resprout control of Hypericum.

➢ ATVs/UTVs/Pickups with larger sprayers for crown re-sprout and seedling control of Hypericum. Size and type vary widely. 500 – 4,000 lbs. Ground pressure 2-20 psi typical for wheeled equipment.

➢ Haul vehicles for equipment/materials hauling. GVWR 10,000 - 15,000 lbs or greater limited to roads.

➢ Misc. pickups and vans for crew support.

Duration of Treatments

The treatments of smaller satellite patches will occur within the same timeline and treatment mobilization as the treatment of re-sprouting root crowns and seedlings within the core patch area as described above. These treatments would last up to 10 years following the initial vegetation removal activities.

Phase III - Restoration

The long-term objective is to restore the core approximately 500--acre *Hypericum canariense*-impacted zone to native-dominated rangeland and productive croplands. In dense areas where *Hypericum canariense* has eliminated all or most of the rangeland vegetation, restoration interventions will be necessary. Opportunistic secondary weed invasions are expected in the most impacted biomass removal areas regardless of biomass removal methods. Superficial secondary weeds, especially annual species, will likely be non-consequential to long term restoration. Management is only necessary if these weed invasions prevent the natural recovery of native woody shrubs or grasslands. These secondary weed invasions are likely to only be a temporary response to the biomass removal disturbance.

Restoration may occur relatively naturally with minimal interventions or it may require a much more substantial, targeted investment. Preexisting site conditions and methods used for Hypericum control will dictate what is necessary for total restoration of the site.

At this time, the extent of restoration necessary is unknown. The following restoration program elements would be typical for similar projects in the region.

Typical restoration methods that may be necessary include the following:

- Restoring the site to natural contours following any significant mechanical disturbance
- Installation of erosion-control features on any areas of bared soils
- Installation of mulches to reduce secondary weed establishment.
- Installation of native plants where natural recruitment is insufficient with either seed or live plants.
- Control, off secondary weeds that impair the restoration and natural recovery process
- Care and maintenance of native plant installations until maturity or self-sufficiency

Summary of Equipment

This component of the project proposes the use of the following equipment:

- Site re-grading - Farm tractors, Skidsteers, bulldozers or excavators. Sizes and types vary widely. 50-400 hp. 10,000 – 50,000 lbs. Ground pressure 4-8 psi typical for tracked equipment and 15-30 psi for wheeled equipment.
- Site Re-grading and Erosion Control - Haul vehicles for equipment/materials hauling. GVWR 15,000 - 80,000 lbs. limited to roads.

- Hydroseeding - Hydroseeder truck. GVWR 15,000 - 80,000 lbs typical. Use on roads and any flat accessible areas truck can drive to access seeding areas.
- Planting - Hand crews using hand augers, shovels, dig bars and hand tools for container plant or grass plug installation.
- All Tasks - Haul vehicles for equipment/materials hauling. GVWR 10,000 - 15,000 lbs. or greater limited to roads.
- All Tasks - Misc. pickups and vans for crew support.

3. ENVIRONMENTAL INFORMATION

Vegetation Treatment Project Information

1. **Project Title:** Hypericum Eradication at the Mushroom Farm
2. **Project Proponent Name and Address:** San Mateo Resource Conservation District, 80 Stone Pine Road, STE 100, Half Moon Bay, CA 94019
3. **Contact Person Information and Phone Number:** Erica Harris, Conservation Project Manager**,** erica@sanmateorcd.org, 650 6712-7765 x 104
4. **Project Location:** San Mateo County east of Highway 1 and six miles south of community of Pescadero.
5. **Total Area to be Treated (acres):** 500
6. **Description of Project**: The project is described in detail in Chapter II, above. It is in the mapped area addressed in the Cal VTP PEIR. Per the Cal VTP PEIR, this project fits the following treatment types as identified on p. 2-7 of the PEIR: Ecological Restoration and Fuel Reduction. Treatment activities include burning, mechanical treatment, manual treatment, and small-scale herbicide application, as described on pp. 2-18 of the PEIR. The Project Description section, above, describes the proposed specific treatment activities. Figures 2 and 3 in the PSR Project Description, above, show the hypericum distribution and proposed treatment areas.

   a. Initial Treatment

   Initial treatments would include ecological restoration treatments by burning, manual, and mechanical treatment methods. See Chapter II, Project Description, for details.

   Treatment Types

   X Wildland-Urban Interface Fuel Reduction: Project will protect Costanoa Campground, Mushroom Farm, the Brewery and gas station

   ☐ Fuel Break

   X Ecological Restoration: Entire removal project is for ecological restoration of infested areas and protection of uninfested adjacent areas from future infestation.

   Treatment Activities

   X Prescribed Burning (Broadcast): Up to 500 acres, areas defined in burn units 1/2/3/4/5/6/7/8.

   X Prescribed Burning (Pile Burning): Pile burning may be used for cut materials not burned or masticated.

   X Mechanical Treatment: Up to 500 acres of the burn area to be masticated or otherwise mechanically treated prior to burning, or if burning not feasible.

   X Manual Treatment: 31 acres near wetlands/stream channels or on extremely steep slopes to be manually treated.

   ☐ Prescribed Herbivory, _____ acres

   X Herbicide Application: Up to 500 acres – re-sprouts in the treatment area will be potentially subject to manually applied herbicide application as follow up maintenance treatment. Spot herbicide use may occur on individual plants at other sites on up to 500 of the overall 629-acre property.

   Fuel Type

   X Grass Fuel Type

X Shrub Fuel Type

X Tree Fuel Type

b. Treatment Maintenance

Selective methods are necessary for isolating target weeds from native vegetation and eliminating them from the site. The preferred method for *Hypericum* control is the selective use of herbicides on re-sprouting individual plants, as well as manual removal. This two-stage treatment process allows for the clear separation of the target weed from desirable re-sprouting native shrubs. Sufficient time would be necessary to allow *Hypericum canariense* to regrow to a suitable size for retreatment. Maintenance treatment is described in detail in Chapter II, Project Description.

7. Regional Setting and Surrounding Land Uses

The project site is located on the west-facing hills above the Pacific Ocean area on the San Mateo County portion of the Central California coast. It is bounded in areas by Highway 1 to the west, forested lands to the east, the Mushroom Farm (which was the site of an old mushroom farm, including large structures, that is currently being used for regenerative agricultural uses) on the north, and a eucalyptus grove and on the south. A gas station/convenience store and brewpub restaurant are immediately adjacent to the site on the west, on Gazos Creek Road, between the proposed treatment area and Highway 1. A lodge and campground, Costanoa Resort, is located just to the south of the southern edge of the treatment area.

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

No other permits or agency approvals are required.

Coastal Act Compliance

☐ The proposed project is NOT within the Coastal Zone

X 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

X 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. For treatment projects with impacts not within the scope of the PEIR, pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, project proponents preparing a new negative declaration, mitigated negative declaration, or EIR must notify any California Native American tribe who has submitted written request for notification of a project in the area of the treatment site. Upon written request for consultation by a tribe, the project proponent must begin consultation before the release of the environmental document and must follow the requirements of the cited PRC sections*

SMRCD reached out to all affiliated tribal contacts on the Native American Heritage Commission Native American Contacts List for the area, requested by Solano Archeological Services LLC, and a similar list provided by partners at CAL FIRE. Consultation letters were sent to all contacts on both lists twice. Letters were sent through USPS mail and email. No responses were received over the duration (three months).

4. DETERMINATION

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

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

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

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

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

Kellyx Nelson Digitally signed by Kellyx Nelson Date: 2022.05.11 09:56:13 -07'00'

Signature | Date

Kellyx Nelson | Executive Director

Printed Name | Title

San Mateo Resource Conservation District

Agency

5. PROJECT- SPECIFIC ANALYSIS

1. Refer to the applicable resource analysis section in the CalVTP PEIR for relevant information on each environmental topic.
2. A brief explanation is required for each impact, including impacts that have been identified in the PEIR as well as any “new impacts”.
3. The discussion of each impact identified in the PEIR that is also applicable to the proposed treatment project should generally include the following information:
   - Briefly describe the impact of the proposed vegetation treatment project.
   - Summarize the impact as it was presented in the PEIR, including a statement that the impact is covered in PEIR.
   - Provide evidence that (explain why) the project impact is covered in PEIR, considering whether the proposed treatment is consistent with the treatment types and activities addressed in the PEIR as well as the associated intensity (i.e., duration).
   - Identify SPRs and MMs applicable to the treatment project.
   - (If applicable) Explain which components of the MM or SPR would be applied. This circumstance exists if the MM or SPR allows for deviation from requirements (e.g., minimum buffer distances), identification of parameters (e.g., tree size for retention), and determinations of feasibility. A site- and/or treatment activity-specific explanation for the planned deviation, identified parameter, or feasibility determination must be provided in the PSA.
   - (If applicable) Explain why the impact significance in the PSA is different than that found in the PEIR; substantiate the different (new) significance conclusion.
   - (If applicable) Explain why MM or SPRs identified for this impact in PEIR do not apply to this project. This circumstance may exist where a PS impact was identified in the PEIR, but the impact severity would be less for the treatment project or the MM does not otherwise apply.
4. If the project proponent has determined that a new impact would occur, then the checklist answers for the new impact must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant without the need for mitigation.
5. “Potentially Significant” is appropriate if there is substantial evidence that a new impact may be significant. If there are one or more “Potentially Significant” new impacts identified, or if any impact would constitute a substantially more severe significant impact than was covered in the PEIR, an EIR is required unless one or more mitigation measures incorporated into the project would mitigate the effects to a point where clearly no significant effect on the environment would occur, in which case an MND would be appropriate. AND could be prepared, if the new impact would be less than significant, or MND, if the new impact could be clearly mitigated to less than significant. The analysis of any new impact to support adoption of an ND or MND, along with the analysis of impacts that are within the scope, would be documented in the PSA checklist. If a later EIR is prepared, it could be limited in its scope to the new significant impact(s) or substantially more severe significant impact(s), with the remainder of the impacts that are within the scope of the PEIR being documented in the PSA checklist and attached to the EIR as an appendix. When preparing any environmental document, the environmental analysis should incorporate by reference pertinent portions of the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.
6. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.

5.1 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	AD-3, 4, AES-1, 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	Yes	AD-3	NA	LTS	No	Yes
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	SU	Impact AES-3, pp. 3.2-25 – 3.2-27	Yes	AD-3, AES-3	NA	LTS	No	Yes

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

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

Discussion

Impact AES-1

Initial and maintenance treatments would include burning, mechanical treatments, and manually applied chemical treatments, which will temporarily alter the visual landscape of the project site. The potential for these treatments to result in short-term degradation of the visual character of the land was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.2.3, page 16-19). The treatment activities and potential impacts are within the scope of the PEIR because they are consistent with the activities and impacts addressed in the PEIR. The project area includes some treatment areas are in close proximity to, and visible from, Highway 1, which is a designated State Scenic Highway. With the implementation of SPR AD-3 and 4, AES-1 and 2, and AQ-2 and 3, the treatments will be consistent with local plans and ordinances, and all treatment related equipment will be stored outside of the public viewshed and will not block views. The proposed project will promote regrowth with native vegetation and will be similar to nearby grass and brush covered hillsides. Therefore, the potential for the project to result in short-term substantial degradation of a scenic vista, visual character, or damage to scenic resources would be less than significant.

Impact AES-2

Initial and maintenance treatments would include fuel reduction, ecological restoration, and fuel break treatment types. The potential for these treatments to result in long-term substantial degradation of the visual character was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.2.3, page 20-22). The treatment areas are in close proximity to and would be visible from Highway 1, a designated State Scenic Highway (CalVTP Final PEIR Volume II Section 3.2.3, Figure 3.2-10, page 24). As analyzed in Impact AES-1, the aesthetic impacts will be temporary and short-term because native plants will regenerate and sprout shortly after the treatments are implemented and will resemble conditions on surrounding hillsides near Highway 1. Based on the implementation of the applicable SPR's and the nature of the treatment types, the potential for this project to result in long-term substantial degradation of the visual character of the project site or damage to scenic resources would be less than significant.

Impact AES-3

The proposed initial and maintenance treatments would include non-shaded fuel breaks in shrub fuel types. The potential for the non-shaded fuel break treatments to result in long-term substantial degradation of the visual character was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.2.3, page 25-27). Potential impacts as a result of the non-shaded fuel break treatment type is within the scope of the PEIR because the treatment activities are consistent with those analyzed in the PEIR. The proposed treatment areas are located within a scenic highway area where non-shaded fuel break treatments would be visible from the Highway. Because the treated areas would revegetate within the first year after treatment with non-invasive native species, in the long term the visual quality of the treated areas would be similar to non-hypericum infested areas along the Highway 1 corridor adjacent to and near the project site. Therefore this impact would be less-than-significant

New Aesthetic and Visual Resource Impacts

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has evaluated and considered site specific characteristics to determine that the project treatments are consistent with the CalVTP PEIR's environmental and regulatory settings (CalVTP Final PEIR Volume II Sections 3.2.1 and 3.2.2). No changed circumstances would lead to new significant impacts not addressed in the CalVTP PEIR. Therefore, no new impact related to aesthetics and visual resources would occur that is not covered in the PEIR.

5.2. AGRICULTURE AND FORESTRY RESOURCES

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

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

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

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

Discussion

Impact AG-1

The project's proposed removal of hypericum is on open lands covered with grasses and brushy vegetation. In addition, some thinning of a eucalyptus grove and the removal of small diameter conifers (Douglass fir trees) establishing in the rangelands also would occur. There are no forest lands or lands designated for forestry on the project site. Therefore the project would have no potential to affect forest resources.

New Agriculture and Forestry Resource Impacts

The project is on open lands mostly covered with Hypericum, coastal scrub and grasslands. The portions of the overall project site are densely infested with hypericum were historically used for agriculture. The project would restore rangelands for grazing and restore areas along the western edge of the site for cultivation use. The project would remove an invasive species and includes some thinning of a eucalyptus grove, and some small diameter Douglass fir trees which are encroaching into the rangelands. Neither activity would have any adverse effects on agricultural or forest resources. No new impacts would occur.

5.3. AIR QUALITY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	SU	Table 3.4-1; Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AQ-1 AQ-4	AQ-1	SU	No	Yes
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	Table 3.4-6; Impact AQ-2 pp. 3.4-33 – 3.4-34; Appendix AQ-1	Yes	AQ-1 HAZ-1 NOI-4 NOI-5	NA	LTS	No	Yes
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	LTS	Section 3.4.2; Impact AQ-3, pp. 3.4-34 – 3.4-35	No	NA	NA	NA	NA	NA
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	SU	Section 3.4.2; Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AQ-2 AQ-3 AQ-6 AD-4	NA	SU	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	AQ-1 HAZ-1 NOI-4 NOI-5	NA	LTS	No	Yes
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	SU	Section 2.5.2; Impact AQ-6; pp. 3.4-38	Yes	AQ-2 AQ-3 AQ-6 AD-4	NA	SU	No	Yes

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

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

	Potentially Significant	**Less Than Significant with**	**Less than Significant**

		Mitigation Incorporated	
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact AQ-1

Use of vehicles and equipment for Hypericum removal and native plant restoration would result in emissions of criteria pollutants that could exceed California ambient air quality standards (CAAQS) and/or national ambient air quality standards (NAAQS) thresholds. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the PEIR. Emissions of criteria air pollutants as a result of vehicle and equipment use under the proposed project would be potentially significant and are within the scope of the PEIR because the project removal/restoration activities, the equipment used/duration of use, the work crew size, etc. would all be consistent with those analyzed in the PEIR. The SPRs applicable to the proposed project are AQ-1 and AQ-4. Certain emission reduction techniques as specified Mitigation Measure AQ-1 may be infeasible for practical considerations. For example, it may be cost prohibitive to use equipment meeting the latest fuel efficiency/emission standards, as also may be using biodiesel fuel, electric- or gasoline-powered equipment in place of diesel, and/or using equipment with Best Available Control Technology. In addition, carpooling may not be feasible because of the rural location of the project site. Therefore, this impact would remain unavoidable and potentially significant for the same reasons explained in the PEIR, but would not be a substantially more severe significant impact than that of the PEIR.

Impact AQ-2

Use of diesel-powered vehicles and mechanical equipment for Hypericum removal and native plant restoration could expose people to their diesel particulate matter emissions. The potential to expose people to diesel particulate matter emissions during vegetation treatments was examined in the PEIR. The PEIR found that, because of the short and intermittent nature of removal/restoration activities and the sparsity of sensitive receptors most rural areas, exposures to incremental cancer risk greater than 10 in one million or to a Hazard Index greater than 1.0 is unlikely. Diesel particulate matter emissions during the project's removal/restoration work would be within the scope of the PEIR, because the project's types and amount of equipment and their duration of use are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are AQ-1, HAZ-1, NOI-4, and NOI-5. This less-than-significant impact of the proposed project diesel particulate emissions is consistent the PEIR finding, and the project's diesel particulate emissions would not constitute a substantially more severe impact than that identified in the PEIR.

Impact AQ-3

This impact does not apply to the proposed project because no naturally occurring asbestos is mapped on the project site.

Impact AQ-4

All feasible measures have been incorporated to minimize smoke emissions as part of the precautionary measures required in the Smoke Management Plan (SPR AQ-2), the Burn Plan (SPR AQ-3) and in the Prescribed Burn Safety Procedures (SPR AQ-6), the latter to prevent unintended adverse effects to offsite receptors. Additionally, SPR AD-4 will alert the public to planned prescribed burns and give them adequate notice to take precautionary measures (e.g., using respirators, closing windows, or temporarily vacating the area, etc.). But any actions taken by the public to reduce exposure to smoke from prescribed burns are voluntary and there are no additional feasible methods to compel the public to reduce its exposure. Thus, even though all feasible emissions reductions and burn notifications have been included in the SPRs, the potential remains for short-term exposure to TACs from unpredictable weather

changes. Therefore, this impact would be potentially significant and unavoidable. This is consistent with the PEIR finding and would not constitute a substantially more severe impact than that identified in the PEIR.

Impact AQ-5

Use of diesel-powered equipment for Hypericum removal and native plant restoration could expose people to objectionable odors from diesel exhaust, an impact which was examined in the PEIR. Consistent with the PEIR, diesel exhaust emissions would be temporary, would not be generated at any one location for an extended period of time, and would dissipate rapidly with distance from the source. In addition, most removal/restoration work would occur in undeveloped areas where human presence is sparse and brief. This impact is within the scope of the PEIR because the equipment and its duration of use for the proposed project are consistent with what was analyzed in the PEIR. SPRs applicable to the proposed project are AQ- 1, HAZ-1, NOI-4, and NOI-5. This impact consistent with the PEIR finding and would not constitute a substantially more severe significant impact than that identified in the PEIR.

Impact AQ-6

All feasible measures have been incorporated to minimize smoke emissions as part of the precautionary measures required in the Smoke Management Plan (SPR AQ-2), the Burn Plan (SPR AQ-3) and Prescribed Burn Safety Procedures (SPR AQ-6), the latter to prevent unintended adverse effects to offsite receptors. Additionally, SPR AD-4 will alert the public to planned prescribed burns and give them adequate notice to take precautionary measures (e.g., using respirators, closing windows, or temporarily vacating the area, etc.). But any actions taken by the public to reduce exposure to smoke from prescribed burns are voluntary and there are no additional feasible methods to compel the public to reduce its exposure further. Thus, even though all feasible precautions and notifications have been included in the SPRs, the potential remains for short-term exposure to odors from unpredictable weather changes could occur. Therefore, this impact would be potentially significant and unavoidable. This is consistent with the PEIR finding and would not constitute a substantially more severe impact than that identified in the PEIR.

New Air Quality Impacts

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has evaluated and considered site specific characteristics to determine that the project treatments are consistent with the CalVTP PEIR's environmental and regulatory settings (CalVTP Final PEIR Volume II Sections 3.4.1 and 3.4.2). No changed circumstances would lead to new significant impacts not addressed in the CalVTP PEIR. Therefore, no new impact related to air quality would occur that is not covered in the PEIR

5.4. ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

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

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

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

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

Discussion

A cultural resources inventory and evaluation report was prepared that included an overview of the project's cultural setting, the results of a Northwest Information Center (NWIC) record search, a summary of Native American community outreach efforts, and the results of a field reconnaissance of the project area. The NWIC record search and additional archival research indicated that while one prehistoric site and a historic-era resource are located near the project area, no sites are known to be present within the proposed project boundaries. Data from the NWIC also indicated that two previous cultural resources investigations included portions of the project area and that a third investigation was conducted along Highway 1 - adjacent to the project area.

Outreach to the Native American community included contacting tribal representatives per CALFIRE's list for San Mateo County for information on cultural and tribal resources in or near the project area and to solicit any concerns

the tribal groups might have regarding the proposed *Hypericum* treatment effort. On September 15th, 2021, each of the individuals on the CALFIRE list (below) were contact by letter with follow-up phone calls on September 22nd but no responses were received.

- Ann Marie Sayers, Chair - Indian Canyon Mutsun Band of Costanoan Indians
- Andrew Galvan, Chair - The Ohlone Indian Tribe
- Ramona Garibay, Representative - Trina Marine Ruano Family

The field reconnaissance indicated that it is not currently possible to survey most of the project area due to the presence of dense and impenetrable *Hypericum* growth, and even following proposed treatment measures, ground surface visibility will be likely be very low in most areas. However, despite existing conditions, a standing building south of the quarry/pond was noted. This building site was not visited during the reconnaissance but is known to be in an area where multiple buildings and structures were present at least until the 1970s. Although the existing building would need to be examined by a qualified architectural historian to determine a construction date, it is almost certainly in excess of 50 years in age. As a result, it has the potential to be classified as a historical resource per State of California regulations.

The field reconnaissance also revealed that much of the project area exhibits steep slopes that are considered low sensitivity for retaining traces of early Native American or Euro-American activities. Named creeks (i.e., Gazos Creek, and Whitehouse Creek) and one un-named drainage present in and adjacent to the project area might indicate sensitivity for prehistoric resources since Native Americans traditionally settled near reliable water sources. However, the steep slopes of the terrain generally preclude that possibility and contributes to a determination that much of the project area exhibits a low level of sensitivity for containing archaeological sites, features, or artifacts. While two areas in the northeastern- and northwestern-most extents of the project area exhibit level or low-slope topography, they are recommended as being moderately sensitive due to a lack of known resources identified by adjacent previous surveys, a lack of adjacent perennial water sources, and early–mid 20th century agricultural impacts.

Impact CUL-1

Hypericum treatment activities will include manual and mechanical treatments, which could damage an historic-era building found to be present in the project area (Solano Archaeological Services, October 2021) . The potential for these treatment activities to result in disturbance to, damage to, or destruction of built-environment resources that have not yet been evaluated for California Register of Historical Resources significance, was examined in the PEIR. Project-related impacts to the documented building would be avoided, per SPR CUL-7. Specifically, a 100-footbuffer would be created to prevent damage to the potentially historic structure from burning and mechanical control techniques. This impact is within the scope of the PEIR, because the treatment activities and the intensity of ground disturbance that would occur under the proposed project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-7 and CUL-8, the latter of which would require worker training when *Hypericum* treatment tasks are planned for within 100 ft. of the building. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-2

Hypericum treatment activities would include the use heavy equipment (e.g., bulldozers, tractors, masticators, skid steers) that could result in significant ground disturbance. These disturbances could damage or destroy presently undocumented prehistoric and/or historic-era cultural resources situated within the treatment areas. The potential for treatment activities to disturbance, damage, or destroy cultural resources was examined in the PEIR. This impact is within the scope of the PEIR, because the *Hypericum* treatment activities and the intensity of ground disturbance that would occur are consistent with those analyzed in the PEIR. SPRs applicable to this impact are

CUL-4 through CUL-8. Mitigation Measure CUL-2 would also apply to this treatment to protect unanticipated discoveries of cultural resources. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-3

Input from the Native American community was solicited for the project consistent with the requirements of SPR CUL-2. On September 15th, 2021, a letter was mailed to the tribal contacts noted above followed by a phone call on September 22nd, 2021. No responses were received from any of the contacts.

The potential for *Hypericum* treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource was examined in the PEIR. Proposed eradication activities include both manual and mechanical treatments methods. Ground-disturbing activities, such as those resulting from the use of heavy equipment, could inadvertently damage or destroy presently undocumented tribal cultural resources in treatment areas. The potential for significant impacts on tribal cultural resources during implementation of the proposed project is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are CUL-5, CUL-6, and CUL-8. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-4

Although archival research (e.g., NWIC record search) did not result in the identification of any cemeteries or other occurrences of human interments, Hypericum treatment activities would include the use heavy equipment (e.g., bulldozers, tractors, masticators, skid steers) that could uncover and disturb presently undocumented human remains. 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 under the proposed project is consistent with what was analyzed in the PEIR. Also consistent with the PEIR, the proposed project would comply with California Health and Safety Code Sections 7050.5 and 7052 and Public Resources Code Section 5097 in the event of a discovery of human remains. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Archaeological, Historical, and Tribal Cultural Resource Impacts

The proposed *Hypericum* treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The SMRCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.5.1, “Environmental Setting,” and Section 3.5.2, “Regulatory Setting,” in Volume II of the Final PEIR). The SMRCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur that is not covered in the PEIR.

5.5. BIOLOGICAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTS	Impact BIO-1, pp 3.6-131–3.6.138	Yes	BIO-1 BIO-2 BIO-6 BIO-7 BIO-9 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HYD-1 HYD-4	BIO-1a BIO-1b BIO-3a	LTS	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTS (all wildlife species except bumble bees) S&U (bumble bees)	Impact BIO-2, pp 3.6-138–3.6-184	Yes	BIO-1 BIO-2 BIO-9 BIO-10 BIO-12 GEO-1 HYD-4	BIO-2a BIO-2b	LTS	No	Yes
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	LTS	Impact BIO-3, pp 3.6-186–3.6-191	Yes	BIO-1 BIO-2 BIO-3 BIO-6 HYD-1 HYD-4	BIO-3a BIO-3b	LTS	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTS	Impact BIO-4, pp 3.6-191–3.6-192	Yes	BIO-1 BIO-2 HYD-1 HYD-4	BIO-3a BIO-3b	LTS	No	Yes
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTS	Impact BIO-5, pp 3.6-192–3.6-196	Yes	BIO-1 BIO-2 BIO-3 HYD-4	None	LTS	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197–3.6-198	Yes	BIO-1 BIO-2 BIO-12	None	LTS	No	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	LTS	Impact BIO-7, pp 3.6-198–3.6-199	Yes	AD-3	None	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 BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	No Impact	Impact BIO-8, pp 3.6-199–3.6-200	No	NA	NA	NA	NA	NA

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

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

None	**Potentially Significant**	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Pursuant to SPR BIO-1, Vollmar Natural Lands Consulting (VNLC) biologists conducted a data review of project-specific biological resources, including habitat and vegetation types, as well as special-status plants, special-status wildlife, and sensitive habitats (i.e., sensitive natural communities, wetlands) with potential to occur in the treatment area. The treatment area occupies an area up to 500 acres on the 629-acre Baltic Pescadero LLC property. Plant communities within the treatment area were mapped according to the units described in the San Mateo County Enhanced Lifeform Map Project (GGNRA and Tukman 2020). Habitat and vegetation types in the treatment areas were evaluated with a reconnaissance-level survey conducted by VNLC and protocol-level vegetation survey data provided by the San Mateo Resource Conservation District (San Mateo RCD 2020). Land cover classifications within the treatment area include deciduous hardwood, eucalyptus, freshwater wetland, riparian forest, herbaceous vegetation, non-native herbaceous, non-native shrub, pine and/or cypress, riparian forest, and shrubland.

A list of special-status plant and wildlife species with potential to occur within the treatment areas was compiled by completing a review of the California Natural Diversity Database (CNDDB), United States Fish and Wildlife Information and Planning Consultation Service (IPaC) and California Native Plant Society Inventory of Rare and Endangered Plants of California database records for the nine U.S. Geological Survey (USGS) quadrangles containing and surrounding the treatment areas (CNDDB 2021; CNPS 2020); in addition to Appendix BIO-3 (Table 1a, Table 1b, and Table 19) in the PEIR (Volume II) for special-status plants and wildlife that could occur in the Central California Coast ecoregion. A list of sensitive natural communities with potential to occur within the treatment areas was compiled by completing a CNDDB search of the nine USGS quadrangles surrounding the treatment areas (CNDDB 2021) and reviewing Table 3.6-3 (pages 3.6-25 – 3.6-27) in the PEIR (Volume II) for sensitive natural communities that could occur in the Central California Coast ecoregion.

VNLC biologists conducted a reconnaissance survey on August 16, 2021 to identify and document sensitive resources (e.g., aquatic habitat, riparian habitat, sensitive natural communities) and to assess the suitability of habitat in the

treatment areas for special-status plant and wildlife species. Vegetation communities were identified and incidental wildlife observations were recorded.

Based on implementation of SPR BIO-1, including review of occurrence data, species ranges, habitat requirements for each species, results of surveys conducted in the treatment area and habitat present within the treatment areas as assessed during reconnaissance surveys, a complete list of all species with potential to occur in the vicinity of the proposed project was assembled (Attachment B). Three listed plant species, and fifteen special-status wildlife were determined to have the potential to occur in the treatment area (see Tables 5.5-1 and 5.5-2). These species are discussed in detail under Impact BIO-1 (special-status plants) and Impact BIO-2 (special-status wildlife). In addition, 34 non-listed CRPR plant species have some potential to occur within the treatment area (Attachment B).

Table 5.5-1 Federally and State Listed Plant Species That May Occur in the Treatment Area

Species	Listing Status[1] State/ Federal /CRPR	Habitat	Potential for Occurrence
Eriophyllum latilobum San Mateo woolly sunflower (Asteraceae)	CE/FE/1B.1	Cismontane woodland, Coastal scrub, Lower montane coniferous forest; 150-1,085 feet; May-June; perennial.	**Potential to Occur.** The Treatment area contains coastal scrub habitat. There are no documented CNDDB occurrences within 5 miles of the treatment area.
Limnanthes douglasii ssp. *sulphurea* Point Reyes meadowfoam (Limnanthaceae)	CE/--/1B.2	Coastal prairie, marshes and swamps, meadows and seeps, Vernal pools; 0-460 feet; March-May; annual.	**Potential to Occur.** The treatment area contains marsh and swamp habitat in the vicinity of the quarry pond. There is one CNDDB occurrence documented approximately 3 miles from the treatment area.
Trifolium polyodon Pacific Grove clover (Fabaceae)	CR/--/1B.1	Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Valley and foothill grassland; 15-1,395 feet; April-June (July); annual.	**Potential to Occur.** The treatment area contains closed-cone coniferous forest habitat. There are no documented CNDDB occurrences within 5 miles of the treatment area.

Notes:
Compiled from a CNPS 8-Quad search of the Davenport, Big Basin, Mindego Hill, San Gregorio, La Honda, Franklin Point, Año Nuevo and Pigeon Point quadrangles.
Bloom Periods in Parentheses indicate that the species *occasionally* blooms during that period.

[1]**Rarity Status Codes**:
E = Federally or State listed as Endangered
T = Federally or State listed as Threatened
R = State listed as Rare

CRPR Codes:
CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere; CRPR List 1B = Plants rare, threatened or endangered in CA and elsewhere; CRPR 2B = Plants rare, threatened or endangered in California but more common elsewhere; CRPR 3 = More information is needed about plant; CRPR 4 = Plants of limited distribution, a watch list

CRPR: '.1' = Seriously threatened in CA; '.2' = Fairly threatened in CA; '.3' = Not very threatened in CA

Table 5.5-2 Special-Status Wildlife Species That May Occur in the Treatment Areas

Species	Listing Status[1]	Habitat	Potential for Occurrence
Special-Status Wildlife			
Amphibians			
Santa Cruz black salamander *Aneides niger*	SSC	Inhabits coastal grassland, open oak and conifer woodlands, redwood forest, mixed evergreen forest and along riparian corridors; adults found under rocks, talus, and damp woody debris.	**Potential to Occur** Riparian habitat along Gazos and Whitehouse Creeks, and along riparian corridors within the treatment area, may offer suitable habitat for breeding and rearing. There are 6 documented CNDDB occurrences within 5 miles of the treatment area.
California giant salamander *Dicamptodon ensatus*	SSC	Adults rarely seen, but sometimes on surface in wet conditions, under rocks or woody debris, or in creeks; larvae found in cold, clear streams, often near headwaters. Mostly associated with dense scrub and forested areas including redwoods.	**Potential to Occur** Riparian habitat along Gazos and Whitehouse Creeks, and along riparian corridors within the treatment area, may offer suitable habitat for breeding and rearing. There are 6 documented CNDDB occurrences within 5 miles of the treatment area.
California red-legged frog *Rana draytonii*	FT, SSC	Marshes, stream pools, reservoirs, ponds. Uses both riparian and upland habitats for foraging, shelter, cover, and non-dispersal movement. Quiet pools of freshwater streams, and occasionally ponds.	**Potential to Occur** Riparian habitat along Gazos and Whitehouse Creeks offer suitable habitat for breeding and rearing. The treatment area containing Gazos is located within CRLF designated Critical Habitat, and there are 20 documented CNDDB occurrences of CRLF within a 5-miles radius.
Birds			
Bald Eagle *Haliaeetus leucocephalus*	FP, BCC	Lower montane coniferous forest, old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine.	**Potential to Occur** Foraging and breeding habitat are present in coniferous forests within the treatment area.
Bank Swallow *Riparia riparia*	ST	Nests near bodies of fresh and salt water in vertical banks and cliffs of fine or sandy soil. Feeds in grassland, shrubland, and savanna year-round, open riparian areas during breeding season, and cropland during migration.	**Potential to Occur** Suitable vertical bank nesting habitat was observed around the quarry pond in the central portion of the treatment area. There is one CNDDB occurrence within 1.8 miles to the northwest of the treatment area. The species is known to occur within the vicinity according to citizen documentations (data from ebird.org).

Black Swift *Cypseloides niger*	SSC, BCC	Nests on cliff edges behind or near waterfalls and sea caves; generally, in dark and inaccessible areas. Forages over forests and open areas.	**Potential to Occur** Open fields within the treatment area may provide foraging habitat; cliff faces may be present around quarry.
Golden Eagle *Aquila chrysaetos*	FP, BCC	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff- walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	**Potential to Occur (forage)** Golden eagles may forage within the treatment areas; however, nesting habitat suitable for the species is not present.
Marbled Murrelet *Brachyramphus marmoratus*	FT, SE	Nests in old-growth conifer forests near ocean. Forage near shorelines but also far offshore.	**Potential to Occur** There is critical habitat for Marbled Murrelet directly west of the treatment area. There are 16 documented CNDDB occurrences within a 5-mile radius of the treatment area Gazos Creek, which follows the northern boundary of the treatment area, is a site of long-term Marbeled Murrelet population monitoring.
Fish			
Coho salmon - Central California Coast ESU *Oncorhynchus kisutch*	FE	Migrate between ocean and freshwater environments, hatch and rear in freshwater environments, migrate to ocean for maturation, return to natal freshwater streams for spawning.	**Potential to Occur** The reaches of Gazos and Whitehouse Creeks with the treatment area provide suitable spawning habitat for adults and rearing habitat for out-migrating juveniles/parr.
Steelhead - Central California Coast DPS *Oncorhynchus mykiss irideus pop. 8*	FT	Streams, rivers, lakes, estuaries, ocean from Russian River south to Soquel Creek and to, but not including, the Pajaro River. Also includes San Francisco and San Pablo Bay Basins.	**Potential to Occur** The reaches of Gazos and Whitehouse Creeks with the treatment area provides suitable spawning habitat for adults and rearing habitat for out-migrating juveniles/parr. Both Gazos and Whitehouse Creek are designated as steelhead critical habitat.
Insects			
Western bumble bee *Bombus occidentalis*	Previously SCE	Nest in underground cavities or animal burrows. Forage and overwinter in meadows and grasslands with abundant flowers.	**Potential to Occur** The treatment area contains suitable habitat in the form of meadows and grassland.
Monarch butterfly *Danaus plexippus*	FCE	Overwinters in tall trees in large groups during migration. Forages on showy nectar source flowers. Breeds on milkweed (*Asclepias* sp.) vegetation.	**Potential to Occur** The treatment area contains suitable overwintering habitat in a eucalyptus grove along the southeastern treatment area boundary.
Mammals			

Townsend's big-eared bat *Corynorhinus townsendii*	SSC, WBWG: H	Pine forest or desert scrub near caves or other rock formations that provide crevices. Less common roosting habitat includes buildings, bridges, and hollow trees. Foraging habitat typically include edge habitat (wooded habitat) along streams.	**Potential to Occur** There is one documented CNDDB occurrence within treatment area.
Reptiles			
Western pond turtle *Actinemys marmorata*	SSC	Permanent and intermittent waters of rivers, creeks, small lakes and ponds, marshes, unlined irrigation canals, and reservoirs.	**Potential to Occur** Gazos and Whitehouse Creeks within the treatment area are freshwater creeks connected to a brackish lagoon and therefore provide suitable habitat. There is one documented CNDDB occurrence within 0.7 miles of the treatment area in Whitehouse Creek.
San Francisco gartersnake *Thamnophis sirtalis tetrataenia*	FE, SE, FP	Aquatic habitat such as ponds or streams with floating or emergent vegetation, and upland habitat such as grasslands, meadows and shrubby areas.	**Potential to Occur** The treatment area contains a mosaic of emergent aquatic habitat and upland grassland, meadows and shrublands. Two populations are known to the vicinity of the treatment area: one in Ano Nuevo State Park to the south, and Butano Farms to the north.

[1] Status definitions:

FT – Federal Threatened;
FE – Federal Endangered;
FCE – Federal Candidate Endangered;
ST – State Threatened;
SE – State Endangered;
SCE – State Candidate Endangered;

BCC – USFWS Bird of Conservation Concern;
SSC – CDFW Species Special Concern;
FP – CDFW Fully Protected;
WBWG: H or M – Western Bat Working Group High or Medium Priority

Impact BIO-1

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on the three listed and 34 CRPR special-status plant species with suitable or marginal habitat in the treatment area, as described in the following sections.

Eight of the special-status plant species with suitable habitat in the treatment areas are typically associated with wet areas (e.g., swamps, marshes, wetlands, riparian forests, mesic areas in forest or grassland, springs, seeps) - western leatherwood (*Dirca occidentalis*), California bottle-brush (*Elymus californicus*), Choris' popcorn flower (*Plagiobothrys chorisianus* var. *chorisianus*), coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*) Point Reyes meadowfoam (*Limnanthes douglasii* ssp. *sulphurea*), bristly sedge (*Carex comosa*), marsh microseris (*Microseris paludosa*), and johnny-nip (*Castilleja ambigua* var. *ambigua*). Application of SPR HYD-1 would prevent impacts to aquatic and wetland plants through the implementation of Waste Discharge Requirements (WDRS) and Basin Plan Prohibitions. Pursuant to SPR HYD-4, Watercourse and Lake Protection Zones (WLPZs) ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas, including wetlands, springs, and seeps, would be implemented, which would avoid adverse effects on these species. SPR BIO-2 would provide worker training for necessary identification and avoidance of special status plants. In the event that treatment activities occur within

riparian habitats, SPR BIO-4 would apply. Pursuant to SPR BIO-4, treatment activities shall be designed to avoid loss or degradation of riparian habitat function. The application of SPR BIO-9 shall ensure implementation of best practices for reducing the spread of invasive species, and minimize impacts associated with their introductions.

SPR BIO-7 would apply to all treatment activities, including maintenance treatments. Pursuant to SPR BIO-7, protocol-level surveys for special-status plants would not be required if the target special-status plant species are herbaceous annual species, stump sprouting species, or geophyte species (13 species included in Attachment B). The treatment may be carried out during the dormant season (November through February) for those species, provided the treatment would not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts of special-status plants. If treatments cannot be completed in the dormant season and would be implemented during the growing period of these annual and geophyte species, protocol-level surveys (per SPR BIO-7) and avoidance of any identified plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented, as described below.

The remaining 14 of the 35 special-status plants that have potential to occur within the treatment areas are perennial species, which could not be avoided in the same manner as herbaceous annual species or geophytes; therefore, protocol-level surveys under SPR BIO-7 to identify them would be necessary prior to implementing treatment activities.

Where protocol-level surveys are required (per SPR BIO-7) and special-status plants are identified during these surveys, Mitigation Measures BIO-1a and BIO-1b would be implemented to avoid loss of identified special-status plants. Per Mitigation Measures BIO-1a and BIO-1b, if special-status plants are identified during protocol-level surveys, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which mechanical treatment and manual treatment would not occur. The application of SPR BIO-9 would ensure implementation of best practices for minimizing the spread of invasive species.

Hypericum canariensis is an invasive plant that outcompetes and degrades habitat value for special-status plants. Removal of this invasive species is consistent with recovery actions for the listed special-status plants indicated in Table 4.5-1 and Attachment B. Therefore, with the incorporation of the above-listed SPR and Minimization Measures, impacts to special-status plant species by treatment activities are expected to be less than significant.

Impact BIO-2

Initial vegetation treatments and follow-up maintenance treatments could result in direct or indirect adverse effects on special-status wildlife species with suitable habitat within a treatment area, as described in the following sections. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities would occur.

Special-Status Salamanders

Two special-status salamanders have potential to occur within treatment areas: California giant salamander (Dicamptodon ensatus) and Santa Cruz black salamander (Aneides niger) (Table 4.5-2). Habitat potentially suitable for these species includes perennial and intermittent streams adjacent to the treatment areas and associated uplands, including forest habitat under duff and logs. WLPZs ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas would be implemented per SPR HYD-4; however, these measures may not result in full avoidance of special-status salamanders if these species are present further than 150 feet from stream habitat. The potential for treatment activities and maintenance treatments to result in adverse effects on special-status salamanders was examined in the PEIR.

Per SPR BIO-1, if it is determined that adverse effects on special-status salamanders can be clearly avoided by physically avoiding the suitable habitat, then no additional mitigation measures would be required. However, because California giant salamander and Santa Cruz black salamander may be present relatively large distances from aquatic habitat throughout the forest habitat in the treatment areas, it is unlikely that all potentially suitable habitat for these species can be avoided. As a result, SPR BIO-10 would apply, and focused surveys for special-

status salamanders would be conducted within suitable habitat prior to implementation of mechanical and manual treatments.

If special-status salamanders are not detected within the treatment areas during focused surveys, then no additional measures for the species would be required. If special-status salamanders are detected during focused surveys, then Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, San Mateo RCD would require biological monitoring for treatment activities within or adjacent to sensitive habitat areas (e.g., streams, seeps, springs, talus slopes), flagging areas for avoidance, relocation of individual animals, and/or other measures recommended by the California Department of Fish and Wildlife (CDFW) as necessary to avoid injury to or mortality of these species.

Overall, habitat function for special-status salamanders would be maintained because initial treatment activities and maintenance treatments would not occur within aquatic habitat, riparian habitat, or WLPZs adjacent to treatment areas. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

California Red-Legged Frog

Breeding habitat potentially suitable for California red-legged frog includes multiple low-order streams within the treatment area, a perennial quarry pond, and Whitehouse and Gazos Creeks. Focused protocol-level surveys for California red-legged frog have not been conducted within the treatment area. Designated critical habitat for California red-legged frog is present along the northern portion of the treatment area including the Gazos Creek watershed. Numerous CNDDB occurrences of the frog are documented within 5 miles of the treatment area.

Studies have demonstrated that California red-legged frogs remain very close to breeding ponds during the breeding season and typically do not move more than approximately 500 feet into upland habitats (Bulger et al. 2003; Fellers and Kleeman 2007). WLPZs ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas would be implemented per SPR HYD-4; however, these measures may not result in full avoidance of California red-legged frogs if these species are present further than 150 feet from aquatic habitat. Adult and juvenile California red-legged frogs are known to travel through upland habitat (e.g., riparian, woodland, grassland) to move between breeding and nonbreeding sites (e.g., other ponds, deep pools in streams, moist and cool riparian understory, burrows) for access to refugia and foraging habitat, or to disperse to new breeding locations. During migration, California red-legged frogs may travel long distances from aquatic habitat and typically travel in straight lines irrespective of vegetation types, and have been documented to move over 1.7 miles between aquatic habitat sites (Bulger et al. 2003).

Because this species could be present within a variety of different habitats throughout the treatment areas while dispersing, there is no feasible way to avoid all potentially suitable habitat for these species. Treatment activities, including removal of invasive and nonnative vegetation and fuel load reduction have been identified by the U.S. Fish and Wildlife Service (USFWS) as recovery actions for California red-legged frog that are likely to improve habitat for the species (USFWS 2016).

Per SPR BIO-2B, if project activities are to be conducted during the wet season (i.e. November-May), a 200-foot buffer shall be implemented around aquatic habitat potentially suitable for California red-legged frog and other special-status herptiles and fish prior to commencement of mastication, broadcast ignition or other ground disturbance by flagging along perennial streams (Class I and Class II) and aquatic habitat areas adjacent to the treatment areas. If project activities are to be conducted during the dry season (i.e. June-October), a 75-100-foot buffer shall be implemented around aquatic habitat potentially suitable for California red-legged frog and other special-status herptiles. If the buffers are determined to be infeasible for certain treatments (e.g., habitat improvement treatments), then SPR BIO-10 would apply, and focused visual encounter surveys for California red-legged frog would be conducted within suitable aquatic habitat areas prior to treatment activities. If California red-legged frogs are identified during focused surveys, Mitigation Measure BIO-2a for this species would be implemented as described below.

If applicable, SPR BIO-10 would require San Mateo RCD to perform focused surveys for California red-legged frogs within high-traffic upland habitats in treatment areas (including all access routes, parking areas, equipment staging areas, and debris storage areas). This would be conducted by a qualified biologist within 14 days prior to implementation of all mechanical and manual treatments to determine whether California red-legged frogs are present. Additionally, pursuant to Mitigation Measure BIO-2a, San Mateo RCD would require biological monitoring during treatment activities. If a California red-legged frog enters a treatment area, all work would stop, and the frog will be allowed to leave on its own. If a California red-legged frog enters a treatment area and will not or cannot leave on its own, the biological monitor will contact a USFWS- and CDFW to determine a course of action.

Habitat function for California red-legged frogs would be maintained because treatment activities, including maintenance treatments, would not occur within aquatic habitat, riparian habitat, or WLPZs adjacent to treatment areas. Additionally, treatment activities, including removal of invasive and nonnative vegetation, as well as fuel load reduction, have been identified by USFWS as recovery actions for California red-legged frog that are likely to improve habitat for the species (USFWS 2016). Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Western Pond Turtle

Aquatic habitat potentially suitable for western pond turtle is present within the quarry pond in the treatment area. This species could also use upland habitat within treatment areas in the vicinity of this pond. WLPZs ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas would be implemented per SPR HYD-4; however, these measures may not avoid impacts on western pond turtles if turtles are present further than 150 feet from stream habitat. The potential for treatment activities and maintenance treatments to result in adverse effects on western pond turtle was examined in the PEIR.

As described above for California red-legged frog, a wet-season 200-foot buffer or dry-season 75-100-foot buffer would be implemented prior to commencement of treatment activities by flagging along perennial streams (Class I and Class II) adjacent to the treatment areas, which would provide additional protection for western pond turtle. If the 200-foot buffer is determined to be infeasible for certain treatments (e.g., habitat improvement treatments), then SPR BIO-10 would apply, and focused visual encounter surveys for western pond turtle would be conducted within suitable upland habitat areas prior to treatment activities. If western pond turtles are identified during focused surveys, Mitigation Measure BIO-2b for this species would be implemented.

Under Mitigation Measure BIO-2b, San Mateo RCD would require biological monitoring for treatment activities within or adjacent to sensitive habitat areas (e.g., streams, pond), relocation of individual animals, flagging of areas for avoidance, and/or other measures recommended by CDFW as necessary to avoid injury to or mortality of these species.

Habitat function for western pond turtle would be maintained because treatment activities and maintenance treatments would not occur within aquatic habitat, riparian habitat, or WLPZs adjacent to treatment areas. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

San Francisco Gartersnake

Aquatic habitat potentially suitable for San Francisco gartersnake is present within the quarry pond, Gazos and Whitehouse Creeks, and riparian corridors in the treatment area. WLPZs ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas would be implemented per SPR HYD-4; however, these measures may not avoid impacts on San Francisco gartersnake if snakes are present further than 150 feet from stream habitat. The potential for treatment activities and maintenance treatments to result in adverse effects on San Francisco gartersnake was examined in the PEIR.

As San Francisco gartersnake can range farther from aquatic habitats than other special-status herptiles with potential to occur in the treatment area a 200-foot buffer would be implemented year-round prior to commencement of treatment activities by flagging along perennial streams (Class I and Class II) adjacent to the treatment areas. If the 200-foot buffer is determined to be infeasible for certain treatments (e.g., habitat improvement treatments), then SPR BIO-10 would apply. If applicable, SPR BIO-10 would require San Mateo RCD to perform focused surveys for San Francisco gartersnakes within high-traffic upland habitats in treatment areas (including all access routes, parking areas, equipment staging areas, and debris storage areas). This would be conducted by a qualified biologist within 14 days prior to implementation of all mechanical and manual treatments to determine whether San Francisco gartersnakes are present.

If San Francisco gartersnakes are identified during focused surveys, Mitigation Measure BIO-2a for this species would be implemented. Under Mitigation Measure BIO-2a, San Mateo RCD would require biological monitoring for treatment activities within or adjacent to sensitive habitat areas (e.g., streams, pond), flagging of areas for avoidance, and/or other measures recommended by CDFW as necessary to avoid injury to or mortality of these species. Additionally, pursuant to Mitigation Measure BIO-2a, San Mateo RCD would require biological monitoring during treatment activities. If a San Francisco gartersnakes enters a treatment area, all work would stop, and the snake will be allowed to leave on its own. If a San Francisco gartersnakes enters a treatment area and will not or cannot leave on its own, the biological monitor will contact a USFWS- and CDFW to determine a course of action.

Habitat function for San Francisco gartersnake would be improved because treatment activities and maintenance treatments would not occur within aquatic habitat, riparian habitat, or WLPZs adjacent to treatment areas. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Birds

Five special-status bird species may occur within the treatment area: Bank Swallow, Bald Eagle, Black Swift, Golden Eagle and Marbled Murrelet (Table 5.5-1). Golden Eagle and Marbled Murrelet are not expected to nest in the treatment area, but Golden Eagle could forage in open scrubland and grassland in the treatment area. There is no suitable breeding or foraging habitat for Marbled Murrelet in the treatment area, but the Santa Cruz Mountains Marbled Murrelet population is known to utilize the Gazos Creek corridor as a flight path to the ocean. Additionally, Marbled Murrelet critical habitat is designated within the northern portion of the treatment area. Treatment activities are not expected to result in adverse effects on occasional foragers or dispersers, such as the Golden Eagle or Marbled Murrelet, because the character of foraging habitat would not be significantly altered by treatment activities. Furthermore, these birds would likely be present within the treatment areas only occasionally.

Nesting habitat potentially suitable for Bank Swallow, Bald Eagle and Black Swift is present within and adjacent to the treatment areas. Per SPR BIO-1.1, if it is determined that adverse effects on suitable habitat for nesting special-status birds can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., nesting bird season), then no mitigation would be required. Adverse effects on nesting special-status birds would be clearly avoided by conducting initial treatments between September 1 and December 31, outside of the nesting bird season (February 1–August 31).

Maintenance treatments, including manual and mechanical treatment activities, may be conducted during portions of the nesting bird season (e.g., February–March, August). These activities could result in direct loss of active special-status bird nests or disturbance to active nests from auditory and visual stimulus (e.g., heavy equipment, chain saws, vehicles, personnel), potentially resulting in abandonment of nests and loss of eggs or chicks. The potential for treatment activities and maintenance treatments to result in adverse effects on special-status birds was examined in the PEIR.

If maintenance treatments would occur during the nesting season, then SPR BIO-10 and SPR BIO-12 would apply, and focused surveys for nesting birds would be conducted prior to maintenance treatments. If no active bird nests

are observed during focused surveys, then additional mitigation for these species would not be required. If active special-status bird nests are observed during focused surveys, then Mitigation Measure BIO-2b (for Bank Swallow, Bald Eagle, Black Swift) would be implemented. Under Mitigation Measures BIO-2b, a no-disturbance buffer of at least 500 feet would be established around active bald eagle nests, and at least 100 feet around the nests of other special-status birds, and no maintenance or treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist. Additionally, trees containing active or inactive bald eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act.

Habitat function for special-status birds would be maintained because treatment activities would not result in removal of trees (i.e., conifers, hardwoods) or snags greater than 8 inches diameter at breast height (DBH), which would be the most likely features to be used by these species due to the cover provided by larger trees. Treatment areas are also unlikely to affect steep, near-vertical cliff slopes which may provide breeding habitat for Bank Swallow and Black Swift. Pursuant to Mitigation Measure BIO-2b, this determination for Bald Eagle must be made by San Mateo RCD in consultation with CDFW. Therefore, if Mitigation Measure BIO-2b is required for maintenance treatment activities, San Mateo RCD would contact CDFW to seek technical input on the determination that habitat function would be maintained for Bald Eagle. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Bats

Habitat potentially suitable for one special-status bat species—Townsend's big-eared bat—is present within forest habitat, rocky areas, and human-made structures (e.g., dilapidated structures) in the treatment area. This species has been detected within the treatment area (CNDDB 2021). Implementing Mitigation Measures BIO-2b would clearly avoid adverse effects on special-status bat maternity roosts by conducting initial treatments between September 1 and December 31, outside of the bat maternity season (April 1–August 31). Maintenance treatments, including manual and mechanical treatment activities, may be conducted during portions of the bat maternity season (e.g., August). Maintenance treatment activities, including mechanical treatments and manual treatments, conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts with auditory and visual stimuli (e.g., heavy equipment, chain saws, vehicles, personnel), potentially resulting in abandonment of the roost and loss of young. The potential for treatment activities, including maintenance treatments, to result in adverse effects on special-status bats was examined in the PEIR.

If maintenance treatments would occur during the bat maternity season, then SPR BIO-10 would apply, and focused surveys for Townsend's big-eared bat would be conducted within suitable habitat areas prior to maintenance treatment activities. If special-status bat roosts are identified during focused surveys, Mitigation Measure BIO-2b for special-status bats would be implemented. Under Mitigation Measure BIO-2b, a no-disturbance buffer of 250 feet would be established around active Townsend's big-eared bat roosts, and mechanical and manual treatments would not occur within this buffer. A no-disturbance buffer of 250 feet is necessary to protect sensitive roosts; this buffer size was adjusted to be larger than the general no-disturbance buffer of 100 feet provided in Mitigation Measure BIO-2b in order to provide adequate protection such that impacts would be less than significant under CEQA.

Habitat function for special-status bats would be maintained because treatment activities, including maintenance treatments, would not result in removal of trees (i.e., conifers, hardwoods) or snags greater than 8 inches DBH, which would be the most likely features to be used by these species due to the cover provided by larger trees. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Fish

Habitat potentially suitable for two special-status fish species is present in reaches of Gazos and Whitehouse Creeks within the treatment area: coho salmon - Central California Coast ESU; steelhead - Central California Coast DPS. Gazos Creek and Whitehouse Creek are also designated steelhead critical habitat. WLPZs ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas would be implemented per SPR HYD-4.

As described above for herptiles (per Mitigation Measures BIO-2a and 2b), a 75-100-foot buffer would be implemented prior to commencement of treatment activities by flagging along perennial streams (Class I and Class II) adjacent to the treatment areas, which would provide additional protection for special-status fish.

Habitat function for special-status fish would be maintained because treatment activities will not disrupt or impact perennial stream function in a meaningful way. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Insects

Habitat potentially suitable for one special-status insect species in present in the treatment area, monarch butterfly - California overwintering population, and one species covered under the PEIR that is no longer a candidate for listing, the western bumblebee, is present in the treatment area. Monarch butterfly overwintering habitat is present in a eucalyptus grove along the southeastern margin of the treatment area. Thinning of the eucalyptus grove is included in treatment activities. As avoidance of potential monarch butterfly habitat is not feasible in this case, SPR BIO-10 would apply, and focused visual encounter surveys for special-status would be conducted in all overwintering habitat in the treatment area. If monarch butterflies are encountered during focused surveys, Mitigation Measure BIO-2b for this species would be implemented to avoid the monarch overwintering period (September 15 - March 15) when monarchs would likely be encountered in eucalyptus groves. When feasible, vegetation treatments within potential monarch habitat should be conducted between March 16 and September 14.

Recommended avoidance and minimization measures listed for western bumble bee shall be presumed not to be required unless the listing status of this species is renewed. Therefore, the following measures will only apply if the listing status of this species is renewed. Habitat for western bumblebee is present in open grassland and shrublands in the treatment area. Per SPR BIO-1, if it is determined that adverse effects on western bumblebee can be clearly avoided by physically avoiding the suitable habitat, then no mitigation would be required. However, it is unlikely that all potentially suitable habitat for these species can be avoided. As a result, SPR BIO-10 would apply, and focused surveys for western bumblebee would be conducted within suitable habitat prior to implementation of mechanical and manual treatments. In addition, Mitigation Measure BIO-2g would apply, initiating several protective measures for western bumble bee. Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September).

Due to difficulty in detecting overwintering and nesting bumble bees and determining the occurrence and severity of impacts, for purposes of good faith, full disclosure under CEQA, this impact is designated in the PEIR to be potentially significant and unavoidable. This finding is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-3

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on sensitive habitats, including designated sensitive natural communities. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. The potential for treatment activities, including maintenance treatments, to result in adverse effects on sensitive habitats was examined in the PEIR.

The proposed project is not designed to impact sensitive natural communities. However, since the Study Area has potential to support sensitive natural communities, the following measures are recommended for sensitive natural communities and riparian areas. By project design, the San Mateo RCD would retain vegetation types with characteristics qualifying as sensitive natural communities to the extent possible, including the retention of live oak trees (see Section 2, "Project Description"). Pursuant to SPR BIO-3, a qualified PRF or biologist would perform a protocol-level survey However, if treatment activities within sensitive natural communities or oak woodlands cannot be avoided, then Mitigation Measure BIO-3a would apply in these areas. Under Mitigation Measure BIO-3a, the qualified biologist would determine the natural fire regime, condition class, and fire return interval for each sensitive natural community and oak woodland type. Treatment activities in sensitive natural communities and oak woodlands would be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function. If habitat function of sensitive natural communities or oak woodlands would not be maintained through implementation of Mitigation Measure BIO-3a, then Mitigation Measure BIO-3b would apply, and unavoidable losses of these resources would be compensated for through restoration or preservation of these vegetation types within or outside of the treatment areas.

This potential impact on sensitive habitats is within the scope of the PEIR because the affected sensitive natural communities and oak woodlands were analyzed in the PEIR, and the treatment activities and intensity of disturbance as a result of implementing vegetation treatments and maintenance treatments are consistent with those analyzed in the PEIR. No impact is anticipated to sensitive plant communities. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR

Impact BIO-4

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on state or federally protected wetlands. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. The potential for treatment activities to result in adverse effects on state or federally protected wetlands was examined in the PEIR.

Impacts to aquatic habitat in the vicinity of the treatment area has been excluded during design of the treatments. Application of SPR HYD-1 would reduce impacts to wetland habitat through the implementation of Waste Discharge Requirements (WDRS) and Basin Plan Prohibitions. Under SPR HYD-4, WLPZs ranging from 50 to 150 feet would be established adjacent to all Class I and Class II streams within the treatment areas, and WLPZs of at least 25 feet would be established around all Class III ephemeral streams within the treatment areas. Establishment of WLPZs would avoid all state or federally protected wetlands. As described above in MM BIO-2a, additional buffers are prescribed around aquatic habitats for protection of special-status herptile species.

This potential impact on wetlands is within the scope of the PEIR because the treatment activities and intensity of disturbance as a result of implementing vegetation treatments and maintenance treatments are consistent with those analyzed in the PEIR. Incorporation of the above-listed SPR s and Mitigation Measures would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-5

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on wildlife movement corridors and nurseries because suitable habitat is present in treatment areas. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. The potential for treatment activities to result in adverse effects on wildlife movement corridors and nurseries was examined in the PEIR.

Based on review and survey of project-specific biological resources (SPR BIO-1), the treatment area does not contain a modeled essential connectivity area, and therefore does not have regionally-significant function as a wildlife movement corridor. However, it still may provide connectivity with other natural habitats surrounding the treatment areas (CDFW 2020). Due to the nature of the proposed treatment activities, implementation of these treatment activities would not result in a substantial change in the existing conditions that facilitate wildlife movement in treatment areas. Through treatments of heavy brush, primarily characterized by invasive *Hypericum canariensis*, habitat would likely be improved and would function better for wildlife movement post-treatment. Eucalyptus thinning activities may have the potential to affect overwintering habitat suitable for monarch butterfly - California overwintering population. Pursuant to SPR BIO-10, focused surveys for any individuals will take place prior to the commencement of treatment activities. Treatment design of eucalyptus thinning to promote ideal microhabitat conditions may improve suitability for monarch butterfly - California overwintering population.

Gazos Creek and Whitehouse Creek are known to provide spawning and rearing habitat for steelhead - California Central Coast DPS and coho salmon - Central California Coast ESU. Both streams are also designated steelhead critical habitat. Treatment design minimizes impacts to these perennial, high value streams. In the event that treatment activities would impact these streams, SPR BIO-10 would apply.

Additionally, no known wildlife nursery sites or indications of nursery sites, such as deer fawning habitat or potential rookery trees with whitewash, were identified within any treatment areas during implementation of SPR BIO-1. However, the natural habitat within treatment areas may be used for movement (e.g., mule deer migration) and cover for common wildlife species. Incorporation of the above-listed SPR s would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-6

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife, including nesting birds, because habitat suitable for these species is present throughout treatment areas. The potential for treatment activities, including maintenance treatments, to result in adverse effects on these resources was examined in the PEIR.

Adverse effects on nesting birds would be clearly avoided by conducting initial treatments between September 1 and December 31, outside of the nesting bird season (February 1–August 31). Maintenance treatments, including manual and mechanical treatment activities, may be conducted during portions of the nesting bird season (e.g., February–March, August). These activities could result in direct loss of active nests or disturbance to active nests from auditory and visual stimulus (e.g., heavy equipment, chain saws, vehicles, personnel) potentially resulting in abandonment of nests and loss of eggs or chicks.

If maintenance treatments would occur during the nesting season, then SPR BIO-12 would apply, and a survey for common nesting birds would be conducted within the treatment areas by a qualified biologist prior to treatment activities. If no active bird nests are observed during focused surveys, then additional mitigation would not be required. If active nests of common birds or raptors are observed during focused surveys, disturbance to the nests would be avoided by establishing an appropriate buffer around the nests, modifying treatments to avoid disturbance to the nests, or deferring treatment until the nests are no longer active as determined by a qualified biologist.

The potential for adverse effects on common wildlife, including nesting birds, is within the scope of the PEIR because the treatment activities and extent of expected disturbance as a result of implementing vegetation treatments, including maintenance treatments, are consistent with those analyzed in the PEIR. SPRs applicable

to this impact are BIO-1, BIO-2, and BIO-12. Incorporation of the above-listed SPR s would bring the potential impact to a less than significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-7

Pursuant to SPR AD-3, the design and implementation of the project shall be consistent with applicable local plans, policies and ordinances. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-8

This impact does not apply to the proposed project because the treatment areas are not within the plan area of any adopted habitat conservation plan or natural community conservation plan. Therefore, this impact does not apply to the proposed project.

New Biological Resource Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. San Mateo RCD has considered the site-specific characteristics of the proposed treatment project and determined that they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.6.1, “Environmental Setting,” and Section 3.6.2, “Regulatory Setting,” in Volume II of the Final PEIR). San Mateo RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances are present that would give rise to any new significant impacts not addressed in the PEIR. Therefore, no new impact related to biological resources would occur that is not covered in the PEIR.

5.6. GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	LTS	Impact GEO-1, pp. 3.7-26 – 3.7-29	Yes	AD-3, GEO-1-8, HYD-4	NA	LTS	No	Yes
Impact GEO-2: Increase Risk of Landslide	LTS	Impact GEO-2, pp. 3.7-29 – 3.7-30	Yes	GEO-1-5, 7, 8,	NA	LTS	No	Yes

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

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

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

Discussion

Impact GEO-1

Vegetation treatments would include burning, manual, and mechanical treatment activities involving vegetation removal and varying levels of soil disturbance, which have the potential to increase rates of erosion and loss of topsoil. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial erosion or loss of topsoil, especially in areas of steep slopes. However, all treated areas, including burn areas, would result in bared soils, which would increase the potential erosion hazard. The proposed project would implement mechanical and/or burn treatments on up to 500 acres on-site, including areas where steep slopes occur (the steepest slopes and Watercourse and Lake Protection Zones would be manually treated). Consistent with the PEIR, SPRs GEO-1 through GEO-8 and HYD-4, would be implemented, which would avoid and minimize the risk of substantial erosion and loss of topsoil as a result of project implementation. This impact is within the scope of the PEIR because the proposed treatment activities and intensity of vegetation removal and associated ground disturbance under the proposed project is consistent with what was analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact GEO-2

Vegetation treatments would include vegetation removal in areas with steep slopes, which could decrease the stability of slopes and increase the risk of landslides. The potential for treatment activities to increase landslide risk

was examined in the PEIR. Landslide mapping shows the site as ranging from few to many landslides, depending on the slope steepness (https://abag.ca.gov/our-work/resilience/data-research/landslide). Removing vegetation during treatments implemented under the proposed project could potentially increase the risk of landslide by baring slopes and removing root systems that stabilize slopes. Consistent with the PEIR, this risk is addressed with the implementation of SPRs GEO-1 through GEO-5, and GEO-7 and 8, which require stabilization of disturbed soil, erosion inspections, prohibiting mechanical treatment on steep slopes, and that a registered professional forester or licensed geologist evaluate treatment areas with slopes greater than 50 percent for unstable areas. This impact is within the scope of the PEIR because the extent and methods of vegetation removal and required avoidance of steep slopes and areas of instability are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Geology, Soils, Paleontology, and Mineral Resource Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.7.1, “Environmental Setting,” and Section 3.7.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impacts related to geology, soils, paleontology, or mineral resources would occur that are not covered in the PEIR.

5.7. GREENHOUSE GAS EMISSIONS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	Impact GHG-1, pp. 3.8-10 – 3.8-11	Yes	None	NA	LTS	No	Yes
Impact GHG-2: Generate GHG Emissions through Treatment Activities	PSU	Impact GHG-2, pp. 3.8-11 – 3.8-17	Yes	NA	GHG-2	SU	No	Yes

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

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

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

Discussion

Impact GHG-1

Hypericum removal through burning and the use of vehicles and mechanical equipment during Hypericum removal and restoration activities would result in greenhouse gas (GHG) emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. Consistent with the PEIR, although GHG emissions would occur from equipment and vehicles used to implement treatments, the purpose of the proposed project is to remove non-native plant species and reintroduce native plant species to the project site, which could increase carbon sequestration over the long-term. This impact is within the scope of the PEIR because the proposed treatment activities, associated equipment, duration of use, and resultant GHG emissions, as well as the project purpose, are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact GHG-2

Hypericum removal through burning and the use of vehicles and mechanical equipment during removal would result in GHG emissions. The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR. Consistent with the PEIR, treatment activities implemented under the proposed project would result in GHG emissions from controlled burning of vegetation, and by off-road equipment, on-road vehicles, machine-powered

hand tools, worker commute trips, and hauling of equipment and materials associated with manual and mechanical treatment activities. This impact would be potentially significant under the proposed project even with the implementation of Mitigation Measure GHG-2 during prescribed burning. No other feasible and effective mitigation exists that would reduce this impact to a less-than-significant level. This impact is within the scope of the PEIR because the proposed project activities, as well as the associated equipment use and duration of use, are consistent with those analyzed in the PEIR. In addition, the intent of the proposed Hypericum removal is to reintroduce more fire-resistant/adaptive native plant species to the project site and thereafter to reduce wildfire risk and their GHG emissions. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Impacts Related to GHG Emissions

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.8.1, “Environmental Setting,” and Section 3.8.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impacts related to greenhouse gas emissions would occur that are not covered in the PEIR.

5.8. ENERGY RESOURCES

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

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

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

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

Discussion

Impact ENG-1

Use of vehicles and mechanical equipment during treatment activities would result in the consumption of energy through the use of fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the PEIR. The consumption of energy during implementation of the proposed project from the use of equipment and vehicles is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Energy Resource Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.9.1, “Environmental Setting,” and Section 3.9.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to energy use would occur that is not covered in the PEIR.

5.9. 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-1-5,	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-5-9	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	No	NA	Mitigation Measure HAZ-3	LTS	No	Yes

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

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

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

Discussion

Impact HAZ-1

Vegetation treatments would include burning, manual, and mechanical treatment activities, which would require the use of fuels, which are considered common hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the PEIR. This impact is within the scope of the PEIR because the types and locations of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. SPR HAZ-1 would be applicable to the proposed project. Any hazardous materials and emissions would result from the use of diesel fuel, chainsaw and mechanized hand tool fuel, and chainsaw bar oil; these materials will be transported and stored in appropriate containers. Hazardous emissions also may result from burning and the use of fuels to ignite burns. All personnel will wear personal protective equipment (PPE) and will be properly trained in the usage of equipment. All equipment associated with the proposed project will comply with SPR HAZ-1 to ensure proper maintenance and minimize leaks. SPR HAZ-2 requires mechanized hand tools to have spark arrestors and will be implemented to minimize the risk of potential ignitions. Based on the proper storage and transportation of fuels and oils, the use of PPE, and the

implementation of the applicable SPR's, the potential for this project to result in significant health hazards from the use of hazardous materials is less than significant. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HAZ-2

The project would use manually applied herbicides for cut stump treatment on steep slopes, within stream protection zones, and for follow-up treatment. Only approved herbicides would be used, and all herbicide use would be by licensed applicators and according to the herbicide labels. Preparation of a spill control plan in compliance with SPR HAZ-5, and following herbicide hazard minimization measures contained in SPR HAZ 6, 7, 8, and 9, would reduce this potential impact to a less-than-significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HAZ-3

The initial and maintenance treatments of this proposed project include mechanical treatments that will disturb soils, which could expose workers, the public, or the environment to hazardous material if a contaminated site is present within the project area. The potential for the treatment activities to disturb or encounter contaminated sites that could expose workers, the public, or the environment to hazardous materials was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, page 18-19). Based on the Cortese List from the DTSC (accessed September 10, 2021), there are no known hazardous waste sites identified within the proposed project area. In addition, the project area does not appear to contain any naturally occurring asbestos. There are no SPR's that apply to this project impact. The project proponent will implement and comply with mitigation measure HAZ-3 to identify and avoid any known hazardous waste sites. Based on the absence of hazardous waste sites and the implementation of mitigation measure HAZ- 3, the potential for this project to result in public or environmental exposure to hazards from known hazardous waste sites would be reduced to less than significant.

New Hazardous Materials, Public Health and Safety Impacts

The proposed project is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined that they comply with the regulatory and environmental setting conditions as stated in the PEIR (CalVTP Final PEIR Volume II 3.10.1 and 3.10.2). No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to hazardous materials, public health, and safety would occur that are not covered in the PEIR.

5.10. 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	AQ-3; BIO-4; GEO-1-8; HAZ- 1, 5; HYD- 1, 2, 4, 6	NA	LTS	No	
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	BIO-4; GEO-1-8; HAZ- 1, 5; HYD- 1, 2, 4,6	NA	LTS	No	
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	No	NA	NA	NI	No	
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	BIO-4; HAZ-5, 7; HYD-1,4,5	NA	LTS	No	

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-6	NA	LTS	No	Yes

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

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

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

Discussion

Impact HYD-1

The proposed burning could bare slopes and thereby increase erosion potential, which could result in impacts to water quality of on-site and downstream water courses. Grading and clearing of fire breaks also could increase erosion potential. Use of vehicles and flammable materials on site could involve risk of fuels and vehicular drippings entering the local water courses. Implementation of the burn plan (SPR AQ-3), erosion control measures (SPR BIO-4 and GEO 1-8), hazardous materials controls (SRP HAZ 1 and 5), and water quality protection measures (SPR HYD-1, 2, 4, and 6) would assure that these impacts are reduced to a less-than-significant level. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-2

Manual and mechanical treatment activities would disturb soils and require the use of fuels, which have the potential to enter waterways and degrade water quality. The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the types and locations of treatment activities and use of heavy equipment and hand-held tools to remove vegetation are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-4, GEO-7, GEO- 8, and HAZ-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-3

This impact does not apply to the proposed project because no prescribed herbivory would occur.

Impact HYD-4

Herbicide application could affect water quality through erosion from bared slopes and from the potential contamination of local water courses and water bodies with herbicides and adjuvants. SPR's BIO-4; SPR HAZ 5, 7; SPR HYD- 1, 4, and 5 would assure that herbicides are correctly applied and stored, and that vehicles that may be used to apply them are correctly maintained. Erosion control measures (SPR GEO-1 through 8) would assure that bared slopes would not result in erosion impacts to water courses. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-5

Use of mechanical equipment and off-road vehicles during treatments could cause ground disturbance and erosion, which could directly or indirectly modify existing drainage patterns. The potential for treatment activities to substantially alter the existing drainage pattern of a treatment site was examined in the PEIR. This impact on site drainage is within the scope of the PEIR, because the types and locations of treatments and treatment intensity are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are HYD-1, HYD-2, HYD-4, HYD-6, GEO-1, GEO-2, and GEO-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Hydrology and Water Quality Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.11.1, "Environmental Setting," and Section 3.11.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to hydrology and water quality would occur that is not covered in the PEIR.

5.11. 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	Yes	SPR AD-3, SPR AD-9	NA	LTS	No	Yes
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15	Yes	NA	NA	LTS	No	Yes

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

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

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

Discussion

Impact LU-1

Vegetation treatment activities would occur within the project site, which is on private agricultural lands in unincorporated coastal San Mateo County. The potential for vegetation treatment activities to cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation was examined in the PEIR. This impact is within the scope of the PEIR because the treatment locations, types, and activities are consistent with those analyzed in the PEIR. No conflicts with a land use plan or policy would occur because the RCD would adhere to SPR AD-3 and the proposed treatments have been designed to be consistent with San Mateo County policies for agriculturally designated lands. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact LU-2

Crews implementing the proposed project would typically range between eight and 12 personnel, and up to three crews would be working simultaneously to implement the proposed project. The potential for treatments to result in substantial population growth as a result of increases in demand for employees was examined in the PEIR. Impacts associated with short-term increases in the demand for workers during implementation of the proposed project are within the scope of the PEIR because the number of workers required for implementation of treatments is generally

consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., two to 10 workers for mechanical treatments, and up to 10 workers for manual treatments). Although the RCD or CalFire would temporarily contract workers to implement the proposed project, it is expected that this demand could be met by new employees who are existing residents in the vicinity of where treatments would occur. The potential also exists for people to relocate to the area for vegetation treatment employees, but there would be sufficient housing to meet the housing demand associated with these new six to eight employees that may relocate from outside of the area. Thus, implementation of the proposed project would not induce substantial unplanned population growth to cause a need for new housing and other infrastructure. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Crews implementing the proposed project would typically range between eight and 12 personnel, and up to three crews would be working simultaneously to implement the proposed project. The potential for treatments to result in substantial population growth as a result of increases in demand for employees was examined in the PEIR. Impacts associated with short-term increases in the demand for workers during implementation of the proposed project are within the scope of the PEIR because the number of workers required for implementation of treatments is generally consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., two to 10 workers for mechanical treatments, and up to 10 workers for manual treatments). It is expected that treatment personnel who are existing residents in the vicinity of where treatments would occur. Due to the short-term nature of project activities, it is unlikely that anyone would move to the area due to temporary employment for this project. Thus, implementation of the proposed project would not induce substantial unplanned population growth to cause a need for new housing and other infrastructure. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Land Use and Planning, Population and Housing Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.12.1, “Environmental Setting,” and Section 3.12.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to land use and planning or population and housing would occur that is not covered in the PEIR.

5.12. 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	Yes	AD-3 NOI-1 NOI-2 NOI-3 NOI-4 NOI-5 NOI-6	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	Yes	NOI-1	NA	LTS	No	Yes

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

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

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

Discussion

Impact NOI-1

Hypericum removal and restoration activities would require the use of noise-generating equipment during implementation. The potential for a substantial short-term increase in ambient noise levels from use of heavy equipment was examined in the PEIR. The San Mateo County Code identifies noise limits for construction activities, which would also apply to vegetation treatment activities. Noise limits under the code are more stringent during the nighttime and early morning hours, between the hours of 6:00 P.M. and 7:00 A.M. weekdays, 5:00 P.M. and 9:00 A.M. on Saturdays or at any time on Sundays, Thanksgiving and Christmas.

The treatment areas are undeveloped, and there are no nearby noise-sensitive receptors. However, treatments would be limited to Monday through Saturday during daytime hours, consistent with the County Code, and no work would occur on Sundays or holidays. In addition, several SPRs would be implemented, including AD-3 and NOI-1 through NOI-6. This impact is within the scope of the PEIR, because the number and types of equipment proposed and the duration of equipment use are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR

Impact NOI-2

Hypericum removal and restoration activity would involve large trucks hauling heavy equipment to the treatment areas. These haul truck trips could pass by residential receptors, and the event of each truck passing by could increase single-event noise levels. The potential for a substantial short-term increase in single-event noise levels was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. The haul trips associated with the proposed treatments would occur during daytime hours, which avoids the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. SPR NOI-1 would be applicable to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Noise Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.13.1, “Environmental Setting,” and Section 3.13.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related noise would occur that is not covered in the PEIR.

5.13. 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	AD-3, REC-1	NA	NI	No	Yes

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

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

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

Discussion

Impact REC-1

The project site is privately owned, agriculturally – zoned land that is not used for, or publicly available for, recreational activities. However, the project site is near the privately owned Costanoa Resort, at 2001 Rossi Road at Highway 1, which includes a lodge, spa, cabins, tent bungalows, and a campground. This facility is directly behind (to the south of) the stand of eucalyptus trees proposed for trimming as part of the project. As such, it is likely that smoke from the controlled burns and noise from mechanical treatment would be noticeable at that resort during treatment activities, although it is not anticipated that closure of the resort would be required during treatment.

The potential for treatment activities to disrupt recreational activities was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.14.3, page 6-7). The temporary disruption of recreational activities during project implementation is within the scope of the activities and impacts addressed in the PEIR because the treatments, associated equipment and duration of use is consistent with those analyzed in the PEIR. Maintaining consistency with local plans, policies, and ordinances (SPR AD-3) and posting notification of recreational area closure a minimum of 2 weeks prior to the commencement of treatment activities (SPR REC-1) would reduce the risk of disruption to recreational activities within the project area.

Following operations, treated areas may be used as opportunities to educate resort patrons, campers, and staff about ecological restoration and fuel reductions in the wildland urban interface. Based on the implementation of SPRs and duration of the project, an impact to recreation as a result of this project would be less than significant.

New Recreation Impacts

The proposed treatment is consistent with the treatment types and activities addressed in the PEIR. The project proponent has considered all site-specific characteristics and determined they are consistent with the regulatory and

environmental setting conditions presented in the PEIR (CalVTP Final PEIR Volume II 3.14.1 and 3.14.2). There are no changed circumstances that would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to recreation would occur that is not discussed in the PEIR.

5.14. 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	Yes	AD-3, TRAN-1	NA	LTS	No	Yes
Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses	LTS	Impact TRAN-2 pp. 3.15-10 – 3.15-11	Yes	AD-3, TRAN-1	NA	LTS	No	Yes
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	PSU	Impact TRAN-3 pp. 3.15-11 – 3.15-13	Yes	None	None	LTS	No	Yes

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

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

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

Discussion

Impact TRAN-1

Vegetation treatments would temporarily increase vehicular traffic along several roads in the project area, including US Highway 1 and Gazos Creek Road The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR. The proposed treatments would be short-term, and temporary increases in traffic related to treatments are within the scope of the PEIR because the treatment duration and limited number of vehicles required (i.e., equipment transport and crew vehicles for crew members) are consistent with those analyzed in the PEIR. In addition, the proposed treatments would not all occur concurrently, and increases in vehicle trips associated with the treatments would be dispersed on multiple roadways. SPRs that would be applicable to the proposed project are AD-3 and TRAN-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact TRAN-2

Vegetation treatments would not require the construction or alteration of any roadways. However, the proposed treatments would require the transportation of heavy equipment along Highway 1 and Gazos Creek Road, which could create increased transportation hazards. The potential for the hauling of machinery to remote treatment areas was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR because the quantity and types of equipment proposed for use that would require transport to treatment areas are the same as those analyzed in the PEIR. In addition, the transport of equipment would be infrequent and dispersed on multiple roadways, occurring at the start and the end of treatment activities. SPRs that would be applicable to the proposed project are AD-3 and TRAN-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact TRAN-3

Treatments could temporarily increase vehicle miles traveled (VMT) above baseline conditions because the proposed project would require vehicle trips to transport crew members and equipment to the treatment areas. This impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP would result in a net increase in VMT. However, as noted under Impact TRAN-3 in the PEIR, individual vegetation treatment projects under the CalVTP are reasonably expected to generate fewer than 110 trips per day, which would cause a less-than-significant transportation impact for specific later activities, as described in the *Technical Advisory on Evaluating Transportation Impacts* published by the Governor's Office of Planning and Research (OPR 2018). Burning, herbicide treatment, manual treatment, and mechanical treatments under the proposed project would typically require eight to 12 personnel, and up to three treatments would be implemented simultaneously. Even if multiple treatments occur simultaneously, the crew sizes are sufficiently small such that the total increase in VMT would not exceed 110 trips per day. In addition, the increase in vehicle trips would be temporary and dispersed to multiple roadways. A temporary increase in VMT is within the scope of the activities and impacts addressed in the PEIR because the number and duration of increased vehicle trips are consistent with that analyzed in the PEIR. This impact would be less than significant, and Mitigation Measure AQ-1 would not be required for this impact of the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Transportation Impacts

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.15.1, "Environmental Setting," and Section 3.15.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to transportation would occur that is not covered in the PEIR.

5.1.5. PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[1]	List MMs Applicable to the Treatment Project[1]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Section 3.16.1 pp. 3.16-2 – 3.16-3; Impact UTIL-1 p. 3.16-9	Yes	NA	NA	LTS	No	Yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	PSU	Section 3.16.1 pp. 3.16-3 -3.16-5; Impact UTIL-2 pp. 3.16-10 – 3.16-12	Yes	SPR UTIL-1	NA	LTS	No	Yes
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Section 3.16.2 pp. 3.16-6 – 3.16-7; Impact UTIL-2 p. 3.16-12	Yes	SPR UTIL-1		LTS	No	Yes

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

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

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

Discussion

Impact UTIL-1

Water may be required to implement the proposed project to minimize dust if excessive dust is created through the use of unpaved roads, or to remove visible dust or mud that gets tracked out onto public paved roadways, pursuant to SPR AQ-4. Water also would be required by tenders for the controlled burn. The potential increase in water demand as a result of treatment activities was examined in the PEIR. The most water-intensive activities described in the PEIR would be providing on-site water for prescribed burning and during vegetation removal within nonshaded fuel breaks. Prescribed burning and the creation of nonshaded fuel breaks would not occur under the proposed

project. This impact is within the scope of the impacts addressed in the PEIR because the treatment types and activities are consistent with those included in the PEIR and the amount of water required during project

implementation is consistent with, although less than, what is analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact UTIL-2

Vegetation treatments would generate biomass as a result of vegetation removal within the treatment areas. Biomass generated by mechanical and manual treatments would be disposed of by chipping, mulching, or lopping and scattering within treatment areas. Burning residual biomass also would remain on-site. This impact was identified as potentially significant and unavoidable in the PEIR because biomass hauled off-site could exceed the capacity of existing infrastructure for handling biomass. For the proposed treatment project, no biomass would be hauled off-site; therefore, there is no potential to exceed the capacity of existing infrastructure, and this impact does not apply to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact UTIL-3

This impact does not apply to the proposed project because all biomass generated from the proposed treatments would be disposed of on-site.

New Impacts to Public Services, Utilities and Service Systems

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.16.1, “Environmental Setting,” and Section 3.16.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to public services or utilities and service systems would occur that is not covered in the PEIR.

5.16. 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	AQ-3, 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, HAZ 2, 2, 4; GEO-3,4,5, 8; HAZ-2,3,4; HYD-1, 2, 4,6	NA	LTS	No	Yes

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

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

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

Discussion

Impact WIL-1

Vegetation treatments would include the use of controlled burns and heavy equipment, which pose a risk of accidental fire ignition. The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR. Increased wildfire risk associated with the use of controlled burns and heavy equipment in vegetated areas is within the scope of the PEIR, because the types of burns, equipment and treatment duration of the proposed project are consistent with those analyzed in the PEIR. SPRs that would be applicable to the proposed project are HAZ-2, HAZ-3, and HAZ-4. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact WIL-2

The proposed project would implement prescribed burning, which could result in postfire flooding or landslides. Those risks would be minimized by the proposed burn plan (SPR AQ-3) and well as erosion control measures include in the Hydrology and Geology SPRs. Spill control measures included in the Hazardous materials SPRs also would reduce the risk of accidental fires.

The project does not include new housing, nor would it result in population growth, thereby potentially exposing more to postfire risks of flooding or landslides. Furthermore, because the treatments reduce wildfire risk, they would also decrease post wildfire landslide and flooding risk in areas that could otherwise burn in a high-severity wildfire without treatment. Therefore, this impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Impacts to Wildfire

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.17.1, “Environmental Setting,” and Section 3.17.2, “Regulatory Setting,” in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to wildfire would occur that is not covered in the PEIR.

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ATTACHMENT A – STANDARD PROJECT REQUIREMENTS AND MITIGATION MEASURES CHECKLIST

Instructions: Review the standard project requirements and mitigation measures and verify that those that are applicable will be implemented. Provide information for each column as follows:

- **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the initial treatment and/or treatment maintenance (Yes or No), and whether it is applicable to initial treatment and/or treatment maintenance. The applicability should be substantiated in the Environmental Checklist Discussion.
- **Timing.** This column identifies the time frame in which the SPR or mitigation measure will be implemented (e.g., prior to treatment, during treatment, etc.).
- **Implementing Entity**. The implementing entity is the agency or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
- **Verifying/Monitoring Entity**. The verifying/monitoring entity is the agency or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Administrative Standard Project Requirements				
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**CAL FIRE**	**SMRCD**
SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: N**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR AD-4 Public Notifications for Prescribed Burning: At least days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance:**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: N**	**During treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. Information on proposed projects (PSA in progress): ▸ GIS data that include project location (as a point); ▸ project size (typically acres); ▸ treatment types and activities; and ▸ contact information for a representative of the project proponent. The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website). Information on approved projects (PSA complete): ▸ A completed PSA Environmental Checklist; ▸ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist); ▸ GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction). Information on completed projects: ▸ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction) ▸ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes ▪ Size of treated area (typically acres); ▪ Treatment types and activities; ▪ Dates of work; ▪ A list of the SPRs and mitigation measures that were implemented ▪ Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to, during, and post-treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b). This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N**	**NA**	**NA**	**NA**
Aesthetic and Visual Resource Standard Project Requirements				
SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: N**	**During treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. Staging of project equipment at the old airstrip area, which currently houses a logging-related operation and equipment, would not adversely affect views compared with existing conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD, CAL FIRE**	**SMRCD**
SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. Staging of project equipment at the old airstrip area, which currently houses a logging-related operation and equipment, may not be fully screened, but would not adversely affect views compared with existing conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
Air Quality Standard Project Requirements				
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD, CAL FIRE**	**SMRCD**
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** The burn plan for this project has been created by CalFire, and has been incorporated into the Project Description. **Treatment Maintenance: N**	**Prior to treatment**	**CAL FIRE, SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
	No burning is proposed during maintenance.			
SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures: ▸ Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. ▸ If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. ▸ Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113. ▸ Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD, CAL FIRE**	**SMRCD**
SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: N** Project is not within a mapped area of naturally occurring asbestos. (https://www.arcgis.com/apps/webappviewer/index.html?id=da4b648958844134adc25ff002dbea1c)	**NA**	**NA**	**NA**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
	Treatment Maintenance: N			
SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements				
SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** This search has been conducted as part of this PSA. **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following: ▸ A written description of the treatment location and boundaries. ▸ Brief narrative of the treatment objectives. ▸ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages. ▸ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. ▸ A request for information regarding potential impacts to cultural resources from the proposed treatment. ▸ A detailed description of the depth of excavation, if ground disturbance is expected. In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** Tribal contact and notification has been conducted as part of this PSA. **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely	**Initial Treatment: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	This study has been conducted as part of the PSA **Treatment Maintenance: Y**			
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** Surveys have been conducted as part of this PSA. **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of	**Initial Treatment: Y**	**During treatment**	**SMRCD, CAL FIRE**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Treatment Maintenance: Y**			
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
Biological Resources Standard Project Requirements				
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:	**Initial Treatment: Y** **Treatment Maintenance: Y** A data review and reconnaissance-level survey have been conducted as part of this PSA. See Biological Resources section of PSA for additional details on database results and site survey.	**Prior to treatment**	**SMRCD**	**SMRCD**
1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided**. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological	**Initial Treatment: Y**	**Prior to and**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist. **2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	. **Treatment Maintenance: Y** Currently, no special-status habitat is anticipated to be affected on the site. Measure would be employed if any are detected during site work to assure no take.	**during treatment**		
SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
(without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Sensitive Natural Communities and Other Sensitive Habitats				
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will: ▸ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). ▸ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**
SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats: ▸ Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities. ▸ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. ▸ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements. ▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service). ▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. ▶ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints. ▶ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry. ▶ The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway. ▶ In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR BIO-5: **Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.** The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed). During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will: ▸ Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale. ▸ The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance. Additional measures will be applied to ecological restoration treatment types: ▸ For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types. ▸ Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less	**Initial Treatment: N** **Treatment Maintenance: N** Type conversion for chapparal and coastal sage scrub is not being proposed, and therefore no measures are recommended for that habitat type.	**NA**	**NA**	**NA**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved. ▶ A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology. ▶ If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity. These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance. A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.				
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle): ▶ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ▶ include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training; ▶ minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; ▶ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and ▶ follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Special-Status Plants				
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances: ▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
Environmentally Sensitive Habitat Areas				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts: ▸ The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA. ▸ Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the vegetation types present in the ESHA. ▸ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs. ▸ Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
Invasive Plants and Wildlife				
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▸ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; ▸ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▸ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▸ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▸ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles; ▸ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and ▸ implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Wildlife				
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design will meet the following standards: ▸ Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale or snag a leaping animal; and, if feasible, keeping electric netting-type fencing electrified at all times or laid down while not in use. ▸ Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted. ▸ Allow wildlife to jump over easily without injury by installing fencing that can flex as animals pass over it and installing the top wire low enough (no more than approximately 40 inches high on flat ground) to allow adult ungulates to jump over it. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass. ▸ Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers. This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N**	**NA**	**NA**	**NA**
SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following: ▸ **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. ▸ **Modify Treatment.** The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist. ▸ **Defer Treatment.** The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests: ▸ **Monitor Active Raptor Nest During Treatment**. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases. ▸ **Retention of Raptor Nest Trees**. Trees with visible raptor nests, whether occupied or not, will be retained. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Geology, Soils, and Mineral Resource Standard Project Requirements				
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During and post-treatment**	**SMRCD**	**SMRCD**
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During and post-treatment**	**SMRCD**	**SMRCD**
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: N** No burning is proposed for maintenance treatment.	**During treatment**	**SMRCD**	**SMRCD**
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**SMRCD**	**SMRCD**
Greenhouse Gas Emissions Standard Project Requirements				
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N** Project would remove mostly shrubs that are not substantial carbon storing vegetation and would be replaced by native vegetation with similar carbon storage.	**NA**	**NA**	**NA**
Hazardous Material and Public Health and Safety Standard Project Requirements				
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This	**Initial Treatment: Y**	**During treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	**Treatment Maintenance: Y**			
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; ▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; ▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: ▸ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▸ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▸ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▸ spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to treatment**	**SMRCD**	**SMRCD**
Hydrology and Water Quality Standard Project Requirements				
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

<table>
<tr><th>Standard Project Requirements</th><th>Applicable? (Y/N)</th><th>Timing</th><th>Implementing Entity</th><th>Verifying/ Monitoring Entity</th></tr>
<tr><td>reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</td><td></td><td></td><td></td><td></td></tr>
<tr><td>SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</td><td>Initial Treatment: Y

Treatment Maintenance: Y</td><td>Prior to and during treatment</td><td>SMRCD</td><td>SMRCD</td></tr>
<tr><td>SPR HYD-3 Water Quality Protections for Prescribed Herbivory: The project proponent will include the following water quality protections for all prescribed herbivory treatments:
▸ Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet will be maintained between sensitive and actively grazed areas.
▸ Water will be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of environmentally sensitive areas.
▸ Treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed.
This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.</td><td>Initial Treatment: N

Treatment Maintenance: N

No prescribed herbivory is proposed with the project.</td><td>NA</td><td>NA</td><td>NA</td></tr>
<tr><td>SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.
Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths
<table>
<tr><th>Water Class</th><th>Class I</th><th>Class II</th><th>Class III</th><th>Class IV</th></tr>
<tr><td>Water Class Characteristics or Key</td><td>1) Domestic supplies, including</td><td>1) Fish always or seasonally present offsite</td><td>No aquatic life present, watercourse</td><td>Man-made watercourses, usually</td></tr>
</table>
</td><td>Initial Treatment: Y

Treatment Maintenance: Y</td><td>Prior to and during treatment</td><td>SMRCD</td><td>SMRCD</td></tr>
</table>

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

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

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed are to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).
- Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.
- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. ▶ Burn piles will be located outside of WLPZs. ▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. ▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers. ▶ Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse. ▶ Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes. ▶ Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicides: ▶ Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. ▶ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. ▶ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives,	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. ▶ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. ▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.				
SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N**	**NA**	**NA**	**NA**
Noise Standard Project Requirements				
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y** Staging areas will be located away from the Costanoa Resort.	**NA**	**NA**	**NA**
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y** The Costanoa Resort management will be notified at least 2 weeks prior to mechanical treatment activities.	**NA**	**NA**	**NA**
Recreation Standard Project Requirements				
SPR REC-1 Notify Recreational Users of Temporary Closures. If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent to will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public	**Initial Treatment: N** **Treatment Maintenance: N**	**NA**	**NA**	**NA**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	There are no recreation areas that will be closed by the proposed project treatment.			
Transportation Standard Project Requirements				
SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**
Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: N** Burning is only proposed as part of initial treatment, not maintenance treatment.	**Prior to and during treatment**	**SMRCD**	**SMRCD**
Public Services and Utilities Standard Project Requirements				
SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating	**Initial Treatment: N**	**NA**	**NA**	**NA**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	**Treatment Maintenance: N** This SPR does not apply to this project because no biomass will be hauled off-site.			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Aesthetics and Visual Resources				
Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks The project proponent will conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation. If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent will, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent will thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to help screen public views and minimize the contrast between the fuel break and surrounding vegetation.	**Initial Treatment: N** **Treatment Maintenance: N** No fuel breaks are proposed as part of the project.	**NA**	**NA**	**NA**
Air Quality				
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: ▶ Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: ▪ meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; ▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ▪ contain no fatty acids or functionalized fatty acid esters; and ▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. ▶ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.				
Archaeological, Historical, and Tribal Cultural Resources				
Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.				
Biological Resources				
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (nor use of associated accelerants) will occur within 50 feet of listed plants. For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.				
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: ▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape. ▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During treatment**	**SMRCD**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer. A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.				
Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment. The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in	**Initial Treatment: Y** Currently, no special-status plants are anticipated to be affected on the site. Measure would be employed if any are detected during site work. **Treatment Maintenance:Y**			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead: ▶ creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species); ▶ purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and ▶ if the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future. If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation: ▶ the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when: ▶ habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and ▶ reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region. If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity. If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations. If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat. If the loss of occupied habitat cannot be offset (e.g., if preservation of existing populations or creation of new populations through relocation efforts are not available for a certain species), and as a result, treatment activities would substantially reduce the number or restrict the range of listed plant species, then the treatment will not qualify as within the scope of this PEIR. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.				
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. ▸ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c. ▸ Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided. <u>Maintain Habitat Function</u> ▸ The project proponent will design treatment activities to maintain the habitat function, by implementing the following: ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging,	**Initial Treatment: Y** Currently, no special-status wildlife species are anticipated to be affected on the site. Measure would be employed if any such species are detected during biological monitoring. **Treatment Maintenance: Y**			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. ▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained. ▸ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.				
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> ▸ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed.	**Initial Treatment: Y** Currently, no special-status wildlife species are anticipated to be affected on the site. Measure would be employed if any such species are detected during biological monitoring. **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). ▶ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. ▶ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods. <u>Maintain Habitat Function</u> ▶ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. ▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. ▸ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment.				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment. Compensation may include: 1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and 2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, or removing existing movement barriers or other existing features that are adversely affecting the species). The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat. Review requirements are as follows: ▶ The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. ▶ For species listed under ESA or CESA or a California Fully Protected Species, the project proponent will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment.	**Initial Treatment: N** **Treatment Maintenance: N** The biological surveys found no need for compensatory mitigation. See Biological Resources section of PSA.	**NA**	**NA**	**NA**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.				
Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities) If elderberry shrubs within the documented range of valley elderberry longhorn beetle are identified during review and surveys for SPR BIO-1, and valley elderberry longhorn beetle or likely occupied suitable elderberry habitat (e.g., within riparian, within historic riparian, containing exit holes) is confirmed to be present during protocol-level surveys following the protocol outlined in USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017) per SPR BIO-10, the following protective measures will be implemented to avoid and minimize impacts to valley elderberry longhorn beetle: ▶ If elderberry shrubs are 165 feet or more from the treatment area, and treatment activities would not encroach within this distance, direct or indirect impacts are not expected and further mitigation is not required. ▶ If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented: ▪ A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant will be fenced or flagged and maintained to avoid direct impacts (e.g., damage to root system) that could damage or kill the plant, with the exception of the following activities: – Manual trimming of elderberry shrubs will only occur between November and February and will avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects on valley elderberry longhorn beetle. – Manual or mechanical vegetation treatment within the drip-line of any elderberry shrub will be limited to the season when adults are not active (August - February), will be limited to methods that do not cause ground disturbance, and will avoid damaging the elderberry. ▪ A qualified RPF, biologist, or biological technician familiar with valley elderberry longhorn beetle and its life history will monitor the work area to verify the avoidance and minimization measures are implemented. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to valley elderberry longhorn beetle. If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of VELB or degradation of occupied habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.	**Initial Treatment: N** **Treatment Maintenance: N** No elderberry shrubs are located on the site.	**N/A**	**N/A**	**N/A**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures will be implemented: ▶ Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34). ▶ Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants. ▶ Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type will not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore. ▶ Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained. If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c. **CESA and ESA Listed Species.** A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. **Other Special-status Species.** A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after	**Initial Treatment: Y** Currently, no special-status butterfly host plants are anticipated to be affected on the site. Measure would be employed if any are detected during general surveys. **Treatment Maintenance: Y**			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity

implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.
The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.

Table 3.6-34 Special-status Butterflies and Associated Host Plants

Butterfly Species	Host Plants
bay checkerspot butterfly	dwarf plantain (*Plantago virginica*), purple ow clover (*Castilleja exserta*)
Behren's silverspot butterfly	blue violet (*Viola adunca*)
callippe silverspot butterfly	California golden violet (*Viola pedunculata*)
Carson wandering skipper	salt grass (*Distichlis spicata*)
El Segundo blue butterfly	seacliff buckwheat (*Eriogonum parvifolium*)
Hermes copper butterfly	spiny redberry (*Rhamnus crocea*)
Kern primrose sphinx moth	plains evening-primrose (*Camissonia contort* primrose (*Camissonia campestris*)
Laguna Mountains skipper	Cleveland's horkelia (*Horkelia clevelandii*), st cinquefoil (*Drymocallis glandulosa*)
Lange's metalmark butterfly	naked-stemmed buckwheat (*Eriogonum nud*
lotis blue butterfly	seaside bird's foot trefoil (*Hosackia gracilis*)
Mission blue butterfly	lupine (*Lupinus* spp.)
Myrtle's silverspot butterfly	blue violet
Oregon silverspot butterfly	blue violet
Palos Verdes blue butterfly	Santa Barbara milkvetch (*Astragalus trichopo* common deerweed (*Acmispon glaber*)
San Bruno elfin butterfly	broadleaf stonecrop (*Sedum spathulifolium*), manzanita (*Arctostaphylos* spp.), huckleberry (*Vaccinuum* spp.)
Smith's blue butterfly	seacliff buckwheat, seaside buckwheat (*Erio latifolium*)

Mitigation Measures		Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Quino checkerspot butterfly	dwarf plantain, purple owl's clover				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities) If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented: ▸ To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment activities will not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species. ▸ To avoid and minimize impacts to Casey's June beetle, Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*), Delta green ground beetle (*Elaphrus virisis*), Morro shoulderband snail, Ohlone tiger beetle (*Cicindela ohlone*), and Trinity bristle snail, treatment activities will not occur within habitat in the range of these species that is deemed suitable by a qualified RPF or biologist with familiarity of the species. If the project proponent cannot implement the measures above to avoid mortality, injury or disturbance to listed beetles, flies, grasshoppers, and snails, or degradation of suitable habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.	**Initial Treatment: N** **Treatment Maintenance: N** No habitat for Special-Status beetles, flies, grasshoppers, or snails exists on the treatment areas	**NA**	**NA**	**NA**
Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible: ▸ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season.	**Initial Treatment: N** **Treatment Maintenance: N** No habitat for Special-Status bumble bees exists on the treatment areas.	**NA**	**NA**	**NA**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). ▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September). **CESA and ESA Listed Species.** A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. **Other Special-status Species.** A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.				
Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory) The project proponent will implement the following measure if treatment activities are planned within the range of desert bighorn sheep, peninsular bighorn sheep, Sierra Nevada bighorn sheep, or pronghorn: ▸ Prescribed herbivory activities will be prohibited within a 14-mile buffer around suitable habitat for any species of bighorn sheep within the range of these species consistent with the more stringent recommendations in the Recovery Plan for Sierra Nevada bighorn sheep (USFWS 2007). ▸ Prescribed herbivory activities will be avoided within the range of pronghorn where feasible (where this range does not overlap with the range of any species of bighorn sheep).	**Initial Treatment: N** **Treatment Maintenance: N** **No prescribed herbivory is proposed with the project**	**NA**	**NA**	**NA**
Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: ▸ Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.	**Initial Treatment: N** **Treatment Maintenance: N** No Sensitive Natural Communities or oak woodlands exist in the treatment areas	**NA**	**NA**	**NA**

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

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory. The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.				
Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions: ▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: ▪ restoring sensitive natural community or oak woodland functions and acreage within the treatment area; ▪ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or ▪ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.	**Initial Treatment: N** **Treatment Maintenance: N** No Sensitive Natural Communities or oak woodlands exist in the treatment areas	**NA**	**NA**	**NA**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.				
Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following: ▶ Compensate for unavoidable losses of riparian habitat acreage and function by: ▪ restoring riparian habitat functions and acreage within the treatment area; ▪ restoring degraded riparian habitat outside of the treatment area; ▪ purchasing riparian habitat credits at a CDFW-approved mitigation bank; or ▪ preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity. 2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties	**Initial Treatment: Y** Currently, no unavoidable loss of riparian habitat is anticipated. Measure would be employed if such loss were determined to occur during site work. **Treatment Maintenance:**			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
responsible for long-term management and monitoring of the restored or enhanced habitat. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.				
Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands Impacts to wetlands will be avoided using the following measures: ▶ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. ▶ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**
▶ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. ▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Within this buffer, herbicide application is prohibited. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**SMRCD**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
▸ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained. ▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ▪ Fire containment lines and pile burning are prohibited within the buffer ▪ No fire ignition (nor use of associated accelerants) will occur within the wetland buffer				
Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: ▸ **Retain Known Nursery Sites**. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment ▸ **Establish Avoidance Buffers.** The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.	**Initial Treatment: N** **Treatment Maintenance: N** No nursery sites or habitats exist in the treatment areas	**NA**	**NA**	**NA**
Greenhouse Gas Emissions				
Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National Wildfire	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior to and during treatment**	**CALFIRE**	**SMRCD**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018): ▸ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▸ reduce the total area burned through mosaic burning; ▸ burn when fuels have a higher fuel moisture content; ▸ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ▸ schedule burns before new fuels appear. As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.				
Hazardous Materials, Public Health and Safety				
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous 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	**Initial Treatment: N** **Treatment Maintenance: N** No known hazardous waste sites exist in the treatment areas	**NA**	**NA**	**NA**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
or known contamination is located on a project site, the project may proceed as planned.				