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PWP-2-VTP-21-0002-2

(SAN MATEO COUNTY RESOURCE CONSERVATION DISTRICT)

JUNE 25, 2021

EXHIBITS

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Exhibit 1

SAN MATEO RESOURCE CONSERVATION DISTRICT

-Public Draft-

San Mateo County Forest Health and Fire Resilience Public Works Plan (PWP)

Project Proponent: San Mateo Resource Conservation District

Date of Public Review Draft PWP: May 6, 2021
Date of Proposed RCD Public Hearing: June 17, 2021

I. Introduction

This Public Works Plan (PWP) has been designed in collaboration with staff from the California Coastal Commission (CCC), County of San Mateo Planning Department, CalFire, and California State Parks. This PWP is based on in the requirements of Section 30605 of the Public Resources Code, which enables the CCC to "promote greater efficiency for the planning of any public works or state university or college or private university development projects and as an alternative to project-by-project review." PWPs are meant to provide a single document that establishes a framework for comprehensive planning, reviewing, and permitting. This then allows a suite of related activities that would otherwise trigger the need for individual Coastal Development Permits (CDPs) to instead be analyzed as an integrated and coordinated system, thus expediting the permitting process and saving money through use of a comprehensive permit vehicle. This PWP has also been developed to function as a companion to CalFire's statewide Vegetation Treatment Program (CalVTP) and its associated Programmatic Environmental Impact Report (PEIR). In addition to the CalVTP, the collaborators developed the Coastal Vegetation Treatment Standards (Coastal VTS) to provide additional guidance and clarity for projects to be implemented within the Coastal Zone and within and/or in proximity to Environmentally Sensitive Habitat Areas (ESHAs). As such, this PWP provides a planning framework to review and authorize individual vegetation management projects in San Mateo County over the next ten years using principles, strategies, and best management practices that align fire prevention planning with coastal resource protection.

The San Mateo Resource Conservation District's (RCD's) proposed Forest Health and Fire Resilience PWP focuses explicitly on developing a cost-effective and programmatic approach to compliance with the California Coastal Act to increase the pace and scale of critical project implementation to improve both ecological conditions and the resilience of our landscapes to future climate change-induced wildfire. Projects that fit within, and are consistent with, the PWP and are designed with RCD oversight will be able to utilize the compliance procedures articulated in this document and will not be required to obtain individual CDPs from the County or pay them CDP fees.

This PWP is intended to serve as an optional compliance pathway for Forest Health and Fire Prevention projects within San Mateo County's Local Coastal Program (LCP) area. Local landowners will continue to be able to obtain a traditional CDP through the County if they so choose or if a project cannot be designed to meet the standards and guidance provided in this PWP. Projects on federal land or with a federal lead agency can continue to comply with the Coastal Zone Management Act through the CCC's Federal Consistency Office in San Francisco, and projects that are currently exempt from the Coastal Act will continue to be exempt.

This PWP is divided into the following 7 Sections:

- Section I: Introduction

- Section II: Purpose and Need
- Section III: Program Description
- Section IV: CalVTP Protection Measures and the Coastal VTS
- Section V: Local Planning Context
- Section VI: Summary of CalVTP Project Specific Analysis for Camp Butano Creek
- Section VII: Administration, Approval Process & Program Review
- Section VIII: Glossary of Terms

II. Purpose and Need

Purpose

The 2020 California wildfire season was a record-setting year of wildfires that burned across the state of California. "*As of the end of the year, nearly 10,000 fires had burned over 4.2 million acres, more than 4% of the state's roughly 100 million acres of land, making 2020 the largest wildfire season recorded in California's modern history. California's August Complex fire has been described as the first "gigafire" as the area burned exceeded 1 million acres. The fire crossed seven counties and has been described as being larger than the state of Rhode Island.*" [1] The 2020 wildfire season arrived on the heels of the 2018 wildfire season, which at the time was the largest and most destructive on record. The mass destruction seen in the 2018 wildfire season ushered in a series of executive orders, legislation, and reports focused on identifying (a) the factors driving the level of catastrophic fire affecting the state, (b) the barriers to implementing fuel load reduction and forest resilience work at an appropriate pace and scale, and (c) the key tools and mechanisms necessary to turn the tide on this crisis and set the state on a trajectory that reduces the risk, severity, and impact of catastrophic wildfires. The California Forest Management Task Force's January 2021 *Wildfire and Forest Resilience Action Plan* is a clear call for increasing the pace and scale of fuel reduction and forest health actions, and places the essential work described in this PWP within the critical context of state, regional, and local fire resilience efforts.

Like many areas of the state, forest, woodland, and grassland landscapes across the Santa Cruz Mountains are undergoing significant change. The climate here is becoming warmer and drier, endemic species are at risk, invasive species are on the move, and sudden oak death has taken an immeasurable toll on regional ecosystems and overall forest health. At the same time, drier site-adapted conifer species are displacing hardwoods and other sensitive plant species, reducing biodiversity and affecting the suitability of these habitats for rare and special-status wildlife. Altered fire regimes and increased fuel loads are driving larger and more catastrophic wildfires. The result has been damaging changes to ecosystems that require environmentally sensitive landscape-level treatments to redirect the path of both changing climates and ecological conditions impacting the Santa Cruz Mountains and surrounding communities. The 2020 CZU

[1] https://www.fire.ca.gov/incidents/2020/

Lighting Complex Fire is a stark example of the level of risk, wildfire severity, and impacts to our human and biological communities in this landscape. The CZU burned 86,509 acres in San Mateo and Santa Cruz Counties, destroyed 1490 buildings, and exhibited extreme fire behavior. Initial estimates suggest that over 50% of the impacted area burned at high fire severities. Many forested stands that were topographically exposed to the extreme fire behavior experienced significant tree mortality and habitat losses that will take decades to recover.

In addition to the direct human and ecological toll of these catastrophic wildfires is the global toll of their greenhouse gas emissions. The California Air Resources Board, in their draft December 2020 report titled, *Greenhouse Gas Emissions of Contemporary Wildfire, Prescribed Fire, and Forest Management Activities*, estimates that California's 2020 wildfire season resulted in the release of approximately 112 million metric tons of carbon dioxide into the atmosphere[2]. This is equivalent to approximately 24.2 million passenger vehicles driven for an entire year [3].

In the wake of the 2020 CZU fire, partners across the Santa Cruz Mountains are redoubling their efforts to design, permit, and implement critical, high-priority vegetation treatment activities that will reduce future risk of catastrophic, severe intensity fires and create a mosaic of climate and fire resilient native ecosystems. The San Mateo and Santa Cruz County RCDs, in partnership with CalFire, the Coastal Conservancy, public and private landowners, technical advisors, and the Coastal Commission will be leading a regional prioritization effort to identify, design, permit, and implement multiple mission-critical forest health and fuel load reduction projects within the Coastal Zone over the proposed ten-year timeframe of this PWP. This effort will use CalFire Fire Hazard Severity Zone (FHSZ) maps, new high resolution vegetation maps, and input from public and private sector experts in ecosystem and wildfire science to create an ongoing docket of high-priority projects for implementation. Both RCDs currently have funding through grants from CalFire, the Coastal Conservancy, and others for planning and implementation of multiple forest health and fire resilience projects within the Coastal Zone. The RCDs expect additional public and private grant funding over the next decade for design, permitting, and implementation of these priority projects due to the high fire risk within the region, and especially within the Coastal Zone.

This PWP provides a planning framework to review and authorize individual vegetation management projects in San Mateo County's Coastal Zone over the next ten years using principles, strategies, and best management practices that align fire prevention planning with the protection of coastal resources. Over the proposed ten-year period of the PWP, the RCD plans to conduct high-priority forest health and fire resilience projects with voluntary collaborating landowners within the PWP Program Area in moderate to very

[2] https://ww3.arb.ca.gov/cc/inventory/pubs/ca_ghg_wildfire_forestmanagement.pdf
[3] https://news.bloomberglaw.com/environment-and-energy/californias-2020-wildfire-emissions-akin-to-24-million-cars

high wildfire hazard areas of the Coastal Zone of San Mateo County. However, activities will not occur across the entirety of this region. The RCD of Santa Cruz County is developing a companion PWP for a program area that spans from the border with San Mateo County in the north to outskirts of Santa Cruz in the south.

Need

The coast is particularly vulnerable to catastrophic wildfires due to historic development and resource management patterns. High-priority forest health and fire prevention projects must be carried out on a routine basis to promote fire resiliency in these coastal areas. Efficient implementation requires programmatic streamlining of California Environmental Quality Act (CEQA) compliance and Coastal Act authorizations. The California Board of Forestry created a tool to address CEQA compliance for large and complex fuel management and forest health projects through adoption of the PEIR the CalVTP in January of 2020 (https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-implementation/). This proposed PWP, along with the Santa Cruz County companion PWP, will be the first of their kind: a programmatic counterpart to the CalVTP to enable streamlined compliance with the California Coastal Act.

To reduce risk of catastrophic wildfire and improve the ecological conditions and trajectories of our forests, woodlands, and grasslands, this PWP provides a programmatic authorization tool that utilizes the CalVTP along with targeted strategies for projects within the coastal zone (as directly incorporated into this PWP and articulated in the Coastal VTS) as the critical framework for project analysis. This PWP enables the San Mateo RCD and project partners to design and implement multiple mission-critical forest health, ecosystem restoration, and fire resilience projects throughout the PWP Program Area over a ten-year period. This PWP also creates a clear and agreed upon process for approval of individual projects submitted under the PWP (Section VI) that includes:

- early consultation among Commission staff, RCD staff, registered foresters or qualified professionals, CalFire, and local landowners;
- inclusion of the Coastal VTS developed by Coastal Commission and RCD staff and technical advisors into the CalVTP Project Specific Analyses (PSAs);
- timelines for PSA review and approval under the PWP process, including through the preparation of Notices of Impending Developments (NOIDs);
- a process for projects that are of the same type and meet the same goals and standards as articulated in the CalVTP and Coastal VTS, but do not fit under the VTP due to either their location being outside the Treatable Landscape or their scale being too small to warrant use of the extensive CalVTP PEIR process; and
- a process for monitoring, enforcement, and programmatic review.

This effort leverages significant collaboration between Coastal Commission staff and RCDs over the past 15 months to develop a set of agreed-upon vegetation treatment standards that are referred to as the Coastal VTS (Exhibit A). The Coastal VTS, coupled with the CalVTP PEIR, provides clear guidance on special requirements for Forest Health and Fire Prevention projects within the Coastal Zone. This effort may also serve as a successful pilot that can be exported to other coastal communities or even coastwide to address the nexus of Forest Health and Fire Prevention projects and Coastal Act compliance.

III. Program Description

Overarching Goal of Forest Health and Fire Resilience Program

This PWP, and the projects that will be approved under it, directly support the intent of the San Mateo RCD's Forest Health and Wildfire Resilience Program goals, California's climate goals, the goals of the 2021 *California Wildfire and Forest Resilience Action Plan*, and the goals of the CCC and applicable Local Coastal Programs for the protection of ESHAs. Approved projects are likely to be implemented within or adjacent to ESHAs and will be designed to do the following.

- Proactively restore forest health, improve ecosystem resiliency, and conserve working forests by conducting ecologically minded forest health treatments.
- Protect state water supply sources by strategically implementing ecological restoration projects across priority watersheds.
- Encourage the long-term storage of carbon in forest and woodland trees and soils through the reduction of dense understory, thus promoting larger, healthier stands of mature trees.
- Minimize the loss of forest carbon from large, intense wildfires through reducing ladder fuels and brush resulting from years of fire suppression.
- Promote public safety, health, and welfare and protect public and private property through the implementation of ecologically restorative fuel reduction treatments in the wildland-urban interface.

Project Design Approach

Vegetation communities and their associated faunal assemblages have evolved with specific disturbance regimes. These regimes result in a mosaic of habitats, and along with energy inputs and stability over time, are important drivers of diversity. In Mediterranean climates, such as those found in much of California, fire is the most important, large-scale natural disturbance regime driving the distribution and composition of vegetative communities.

An expanding population, increased development into the wildland-urban interface, and current policy, which concentrates the state's resources on fire suppression, has resulted in significantly altered vegetation communities and increased fire risk to lives and property. These facts have been widely recognized and significant resources are now being directed towards fuels treatments and forest management. While these treatments are largely motivated by an increase in catastrophic wildfire, they present an opportunity to provide ecological benefits on the lands where they are implemented and to the broader landscape that they are designed to protect.

When developing forestry and other vegetation management projects, the terms forest health, ecosystem restoration, and fuel reduction are often used interchangeably; however, they can either refer to markedly different treatments or end states, or ideally to very similar ones. In the broadest sense, a healthy forest or ecosystem is one that possesses the ability to sustain the unique species composition and processes that exist within it. This encompasses a system's biodiversity, including the plant, animal, and fungal assemblages that occur there, as well as the ecosystem processes and services that the forest provides, such as carbon sequestration, erosion control, and nutrient cycling. Managing for ecosystem restoration or health means managing to sustain and support these assemblages and processes.

Fuel reduction, while often supporting forest or other ecosystem health, is focused on the type, arrangement, and quantity of flammable materials found in the landscape. By modifying any of the attributes mentioned above, fuel reduction projects seek to alter fire behavior, typically reducing intensity, rate of spread, or flame length to assist in wildfires or prescribed fire control. The ultimate goal is to design and implement fuel reduction projects that help protect life and property from wildfire, while simultaneously furthering forest health and ecosystem benefit goals.

Considerate, knowledge-driven fuel reduction projects seek to emulate the effects of evolutionary fire regimes, create a system that is equipped to respond to natural disturbance events in the future, or provide strategic safety measures for fire personnel and the general public, with minimum impacts to the natural environment. With vegetation serving as the primary source of fuel in wildland fires, manipulation of vegetation to create fire resistant, ecologically resilient, and healthy ecosystems is paramount to ensuring the safety of human life and property as well.

As such, while forest health projects are explicitly designed to directly improve both ecosystem health and the provisioning of other essential ecosystem services, fuel reduction projects should, when practicable, also be designed to directly improve ecosystem conditions (e.g., removal of exotic invasive plant species, management that mimics natural disturbance regime, creation of additional edge habitat, etc.). Fuel reduction projects that cannot be designed to directly improve or restore ecosystems or

ecosystem processes will provide indirect ecosystem benefits by reducing the intensity, rate of spread, and extent of catastrophic wildfire on adjacent habitats and ecosystems.

If appropriately designed and implemented, forest health and fuel reduction projects should achieve as many of the following goals as feasible:

- promote a mosaic of native vegetation types that support diverse native floral, faunal, and fungal assemblages and are resilient to climate change;
- improve habitat for rare, threatened, and endangered plant and animal species where they are present;
- increase the ability to manage wildfire and implement prescribed fire;
- reduce impacts to natural and cultural resources from fire suppression activities;
- maintain important cultural landscapes;
- significantly reduce loss of life and property from catastrophic wildfire; and
- educate the public about the role of fire in California's landscapes and their role in it.

These goals acknowledge that complete re-establishment of fire regimes that existed during the evolutionary history of the plants and animals found within the Santa Cruz Mountains cannot be replicated under current conditions. It is also accepted that even if historic fire regimes were re-established, these natural communities have been so altered that the effects of these regimes would not restore most of these communities to a pre-contact state.

Given these constraints, where possible, evolutionarily appropriate fire regimes or surrogates (e.g., mechanical, manual, herbivory, etc.) for those regimes should be enacted or maintained. The following literature provides peer-reviewed support for the design approach described in this PWP: Keeley 2002 [4], Stephens et al. 2012 [5], and Vaillant et al. 2009 [6].

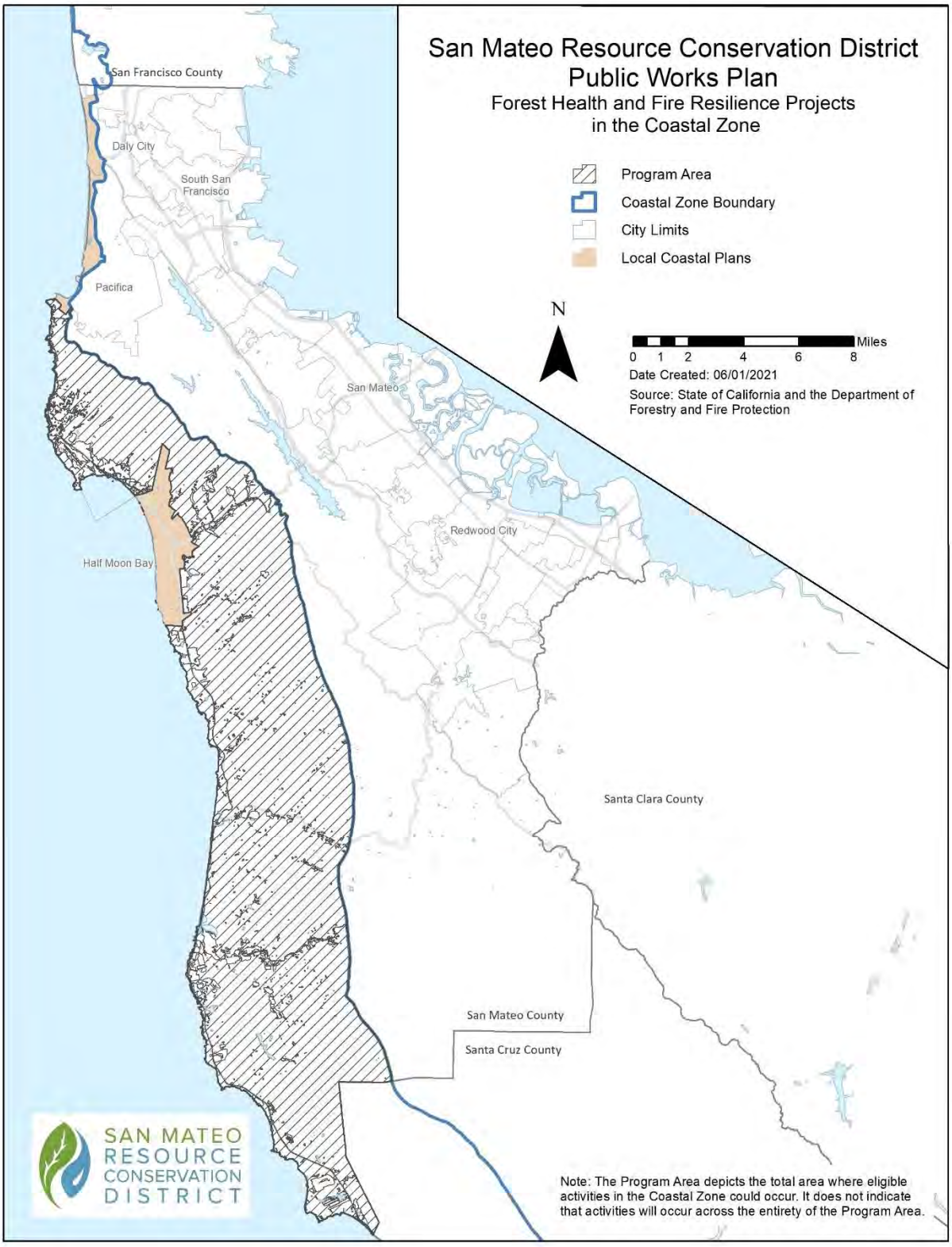
To accomplish this vision of ecological restoration and resilience, improved forest health, and reduced wildfire risk and severity, this PWP will guide development, approval, and implementation of high-priority forest health and fire prevention projects within the PWP Program Area of San Mateo County's Coastal Zone over the next ten years. The PWP Program Area depicts the eligible area where activities under the PWP could occur. However, activities will not occur across the entirety of this region.

[4] https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-2699.2002.00676.x
[5] https://www.firescience.gov/projects/99-S-01/project/99-S-01_bio201262606_Article_Stephens.pdf
[6] https://fireecology.springeropen.com/articles/10.4996/fireecology.0502014

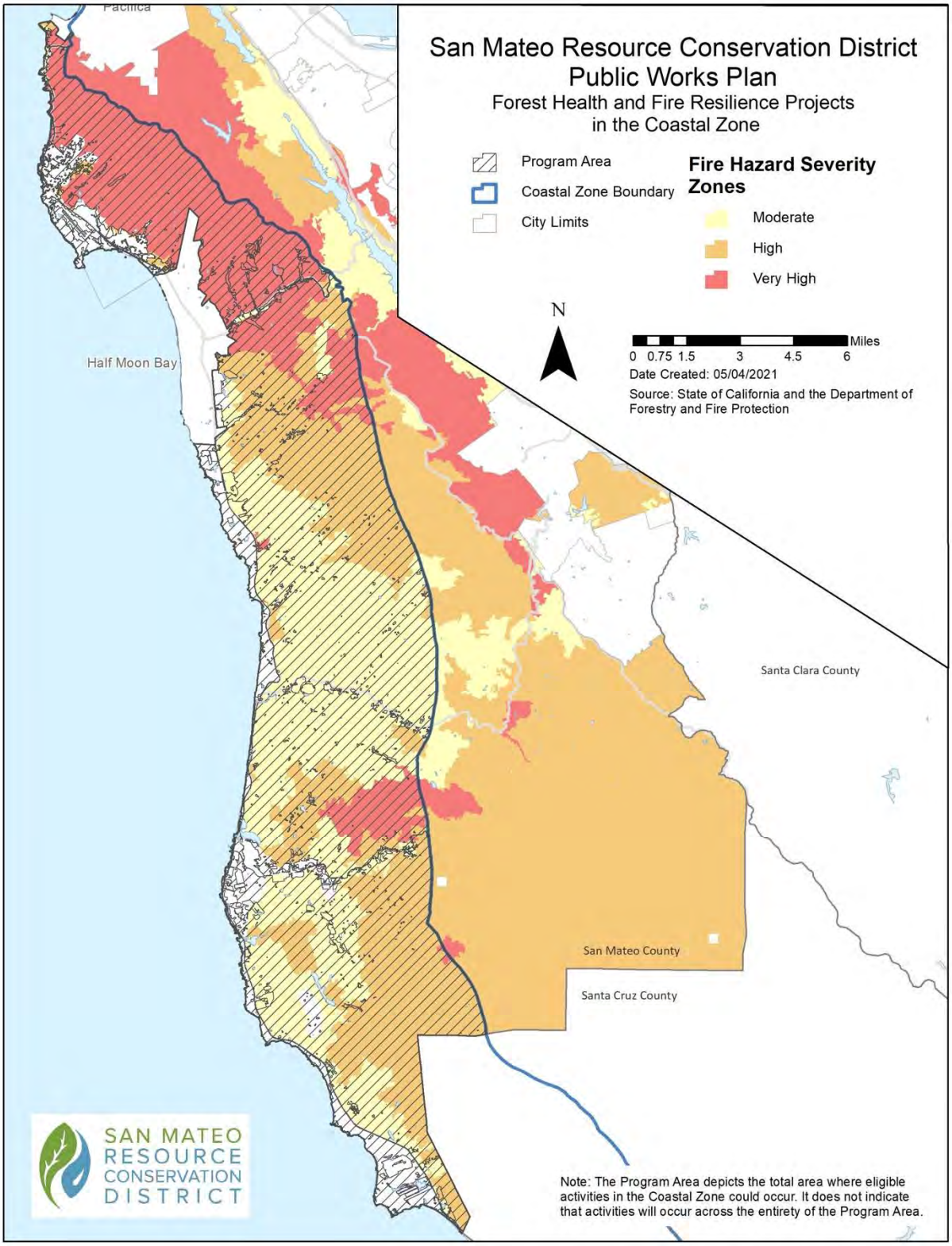
Program Area

The San Mateo RCD's Forest Health and Fire Resilience PWP covers an area within the County's LCP jurisdiction that stretches from boundary with Santa Cruz County in the south to the outskirts of the City of Pacifica in the north. The Santa Cruz County RCD is developing a companion PWP to provide similar coverage there. The PWP Program Area encompasses nearly 85,000 acres where potential future project activities could take place. The RCD does not expect PWP activities to be implemented across the entirety of the Program Area, but at various locations and properties within it. Map #1 shows the geographic context within which the PWP fits as well as the relationship between the PWP Program Area and the approved LCPs for cities within San Mateo County. The PWP Program Area does not include any lands within approved LCPs other than the County of San Mateo LCP.

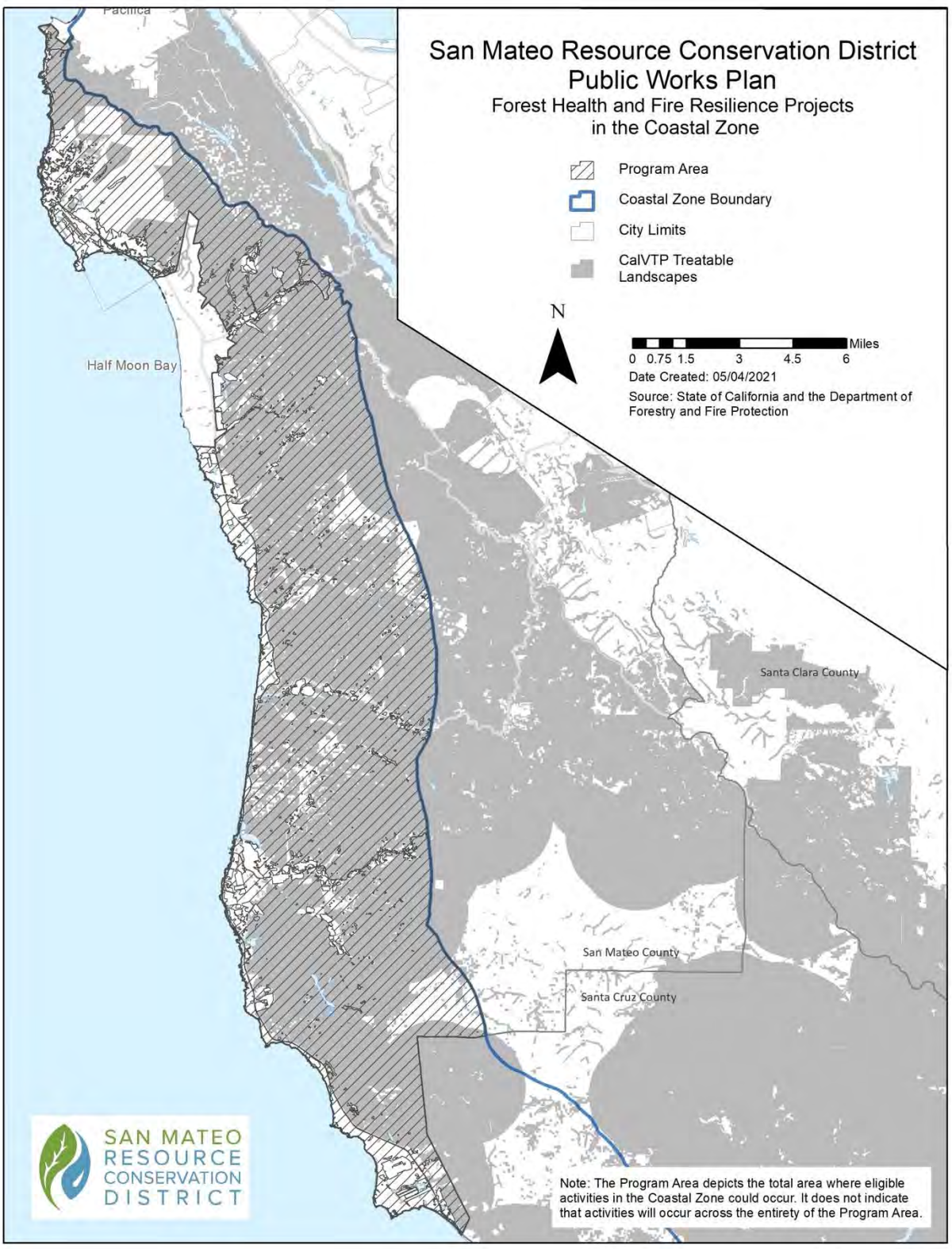
Map #2 displays the PWP Program Area overlayed on CalFire's Fire Severity Zone Maps to provide context for future planning efforts within the PWP Program Area. Map #3 shows the CalVTP Treatable Landscapes map and how that program and its associated PEIR overlap with the PWP Program Area. While the PWP has been developed as a companion to the CalVTP, it is expected that some high-priority projects outside of the modeled treatable landscape will be developed and authorized through the PWP. Map #4 provides additional context by illustrating the vegetation types within the PWP Program Area.



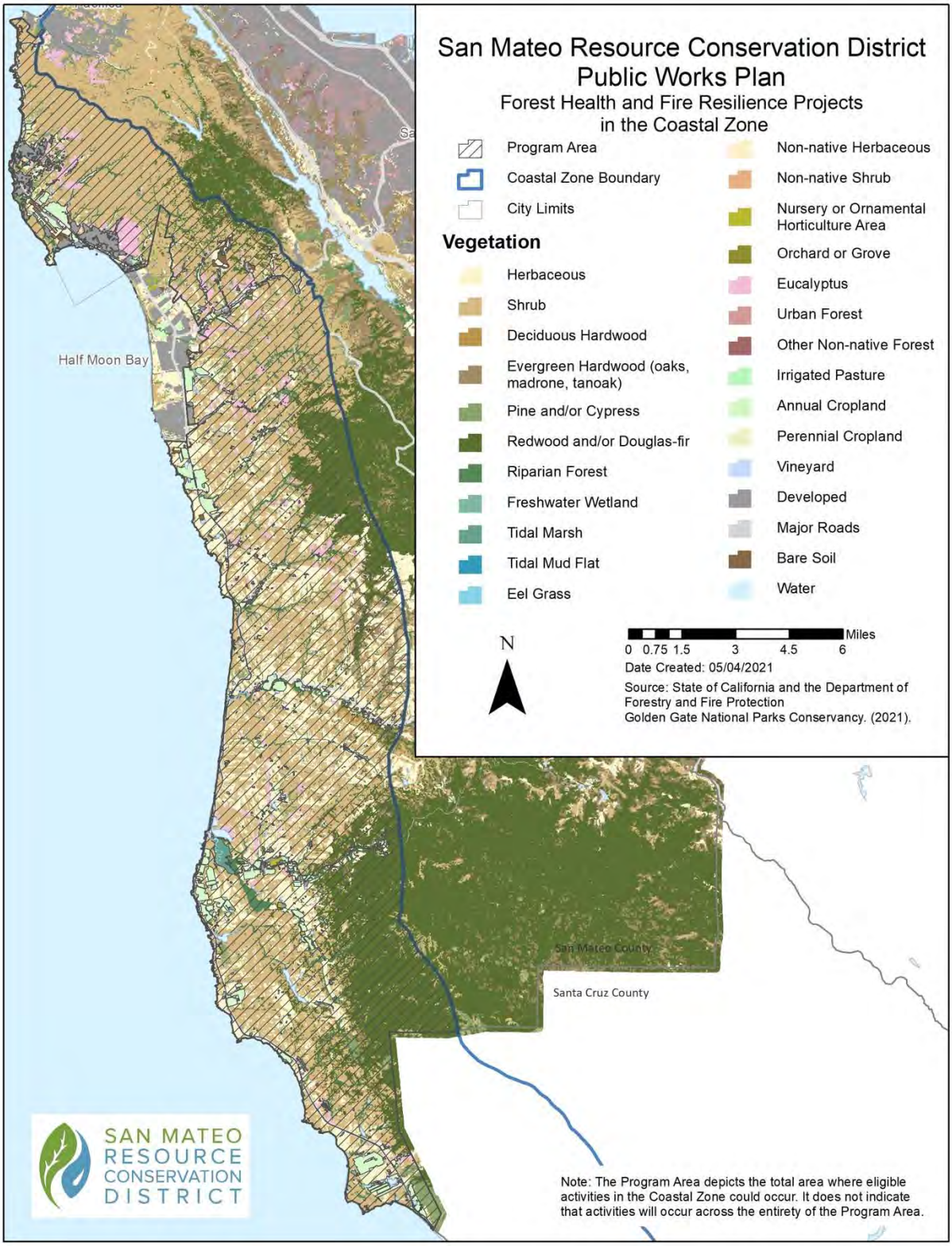
Map 1: PWP Program Area and LCPs



Map 2: PWP Program Area with Calfire Wildfire Severity Hazard Map



Map 3: PWP Program Area with CalVTP Treatable Landscapes



Map 4: PWP Program Area with Vegetation Types

Types of Projects and Activities to be Covered

The projects covered under this PWP will utilize the CalVTP for planning guidance, environmental review, and analysis and will adhere to the mitigation and monitoring requirements as provided in that program. In addition, projects will be designed explicitly to meet the coastal zone-specific requirements contained in the Coastal VTS and designed collaboratively with Commission staff (Exhibit A). Projects occurring within the Coastal Zone, but outside of the CalVTP Treatable Landscape, and/or projects that are too small in scope to warrant utilizing the extensive CalVTP PEIR, will be developed to meet the requirements of the CalVTP as well as the requirements of the Coastal VTS in order to be approved under the PWP. CEQA compliance for projects outside of the CalVTP Treatable Landscape or for projects that are too small in scope to use the CalVTP PEIR will be accomplished through separate, appropriate environmental review—most likely a Categorical Exemption or a Mitigated Negative Declaration that tiers off the analyses and measures in the CalVTP PEIR.

All PWP activities will follow the definitions, guidance, and measures provided in the CalVTP PEIR. The CalVTP PEIR divides project activities into three categories based on the goals of each activity. These categories include Ecological Restoration, Wildland-Urban Interface (WUI) Fuel Reduction, and Fuel Breaks. It is important to note that while the CalVTP PEIR distinguishes between Ecological Restoration and both WUI Fuel Reduction and Fuel Breaks, for the purpose of this PWP, WUI Fuel Reduction and Fuel Break activities will be designed, when practicable, to provide direct ecosystem benefits. Direct ecosystem benefits that could accrue from WUI Fuel Reduction or Fuel Break projects include: removal of non-native invasive vegetation, creation of ecologically valuable edge habitat, revegetation with native plant species, and modifications to vegetation structure that mimic the effects of natural disturbance regimes, etc. Based on geography, proximity to critical infrastructure, and/or specific fire prevention goals, integration of direct ecological restoration benefits may not be possible for all WUI and Fuel Break treatments. That said, all WUI and Fuel Break treatments will provide meaningful indirect ecosystem benefits through reduced severity, intensity, likelihood and extent of catastrophic wildfire in forest, woodland, shrubland, and grassland habitats.

The Coastal VTS categorizes potential projects into two project types that differ from the three defined in the CalVTP PEIR. These two categories are Forest Health projects and Fire Prevention projects. Forest Health projects provide ecological benefits and improve the habitat's fire resiliency, including within ESHAs. Fire Prevention projects, while designed to protect ecosystems as much as feasible, include a level of vegetation removal that may adversely impact ESHAs in order to assure protection of existing structures or infrastructure. Pursuant to this PWP, Forest Health projects can include projects that are categorized through the CalVTP as Ecological Restoration, Wildland-Urban Interface (WUI), and in some cases, Fuel Break activities (for shaded fuel breaks). Fire Prevention

projects include CalVTP WUI Fuel Reduction and Fuel Break activities that could have adverse impacts on ESHAs but are designed to reduce the likelihood of significant and long-term impacts from catastrophic wildfire. These terms are defined below, are consistent with the definitions in the CalVTP, and have been cross-walked with the terms used in the Coastal VTS.

Ecological Restoration:

This treatment includes all of the projects referred to as Forest Health projects as well as other ecosystem health projects in woodlands, shrublands, and grasslands. In areas that have departed from the natural fire regime as a result of fire exclusion, ecological restoration would focus on restoring ecosystem processes, conditions, and resiliency by moderating uncharacteristic wildland fuel conditions to reflect historic vegetative composition, structure, and habitat value. These activities will result in increased forest and ecosystem health, improved native species composition and age structure, and mitigated tree encroachment into coastal shrub and grassland ecosystems. It also includes removing weedy and invasive species and diseased vegetation, with an emphasis on moderating uncharacteristic fuel build-up due to the deprivation of natural fire regimes. This project type generally includes the Forest Health Coastal VTS projects. A given project could include multiple treatment types and fit under either Forest Health or Fire Prevention or both, depending on the specific situation and project objectives that can be implemented.

WUI Fuel Reduction:

Located in WUI-designated areas, fuel reduction would generally consist of strategic vegetation removal to prevent or slow the spread of non-wind-driven wildfire between structures and wildlands. WUI fuel reduction includes vegetation thinning, removing ladder fuels, and increasing defensible space. WUI Fuel Reduction projects can be designed to protect adjacent habitats and ESHAs from extreme fire conditions. In some cases, WUI Fuel Reduction projects can also be designed to provide ecological benefits and improve the habitat's fire resiliency within the treatment area. WUI Fuel Reduction projects are described in the Coastal VTS under both Fire Prevention and Forest Health. A given project could fit under either Fire Prevention or Forest Health or both, depending on the specific situation and project objectives that can be implemented.

Fire Prevention/Fuel Breaks:

In strategic locations, fuel breaks remove flammable vegetation to slow wildfire spread, create a staging area for firefighting efforts, and provide ingress and egress during a wildfire incident. Fuel breaks result in zones of significantly less-dense vegetation, often in a linear layout, and often associated with an existing road or right-of-way. A shaded fuel break maintains a targeted level of tree cover while moderating surface fuels to limit a fire's ability to spread. Fuel Break projects can be designed to protect adjacent habitats and ESHAs from extreme fire conditions. In some cases, shaded fuel breaks can also be designed to provide ecological benefits and improve the habitat's fire resiliency within the treatment area. Fuel breaks are described in the Coastal VTS under both Fire Prevention and Forest Health. A given project could fit under either Fire Prevention or Forest Health or both, depending on the opportunities and constraints for each project location.

The CalVTP PEIR was designed to provide coverage for Ecological Restoration and Fire Break/Fuel Reduction projects located in state-designated treatable landscapes. These treatable landscapes are a combination of State (Fire) Responsibility Area (SRA) lands that fall under the three categories listed above: identified WUI areas, existing fuel breaks along ridgelines and roadways, and ecological restoration treatment areas. As per Appendix PD-1 from the CalVTP PEIR, these treatable landscapes were developed using three Geographic Information System (GIS)-based analyses that compared SRA land, treatable categories, and vegetated landscapes dominated by tree, shrub, or grass communities. Any projects located outside of SRA land (e.g., within local responsibility areas or on federally owned land), as well as areas not pre-identified using the aforementioned treatable landscape categories, are omitted from coverage by the CalVTP PEIR, but not necessarily from the PWP. Because treatable landscapes were determined for the entirety of California utilizing GIS modeling, local, site-specific conditions were often unaccounted for. Map #3 shows areas within and outside of the CalVTP treatable landscape in the PWP Program Area. The PWP envisions three scenarios

where projects would be approved under the PWP, but would not or could not utilize the CalVTP for CEQA compliance. These include:

Fuel Breaks not included in the treatable landscape:

During the CZU Lighting Complex Fire, relic, poorly maintained rural fire roads, skid trails, and logging roads were utilized by fire agencies as strategic suppression locations in the Santa Cruz mountains. Roads of this type are often not included in the "treatable landscape" of the Cal VTP PEIR either because they have been decommissioned, poorly maintained, or have not followed prominent ridges. Nevertheless, these fuel breaks have provided and continue to provide strategic locations for fuel break/fuel reduction projects, and their maintenance is critical to local fire prevention and firefighting efforts.

WUI Fuel Reduction projects outside of the treatable landscape:

Critical Fuel Reduction projects may occur in residential and rural-residential settings within the Coastal Zone and outside of the SRA. Many of these areas were once dominated by low-growing coastal scrub and grassland and are now a matrix of homes and towering flammable fuels. These fuels include invasive tree species such as *Eucalyptus* and fast growing non-native invasive woody shrubs like hypericum, gorse, and broom. WUI Fuel Reduction projects could include the strategic removal of these species for both fuel management and ecosystem restoration. Projects could occur on private or public lands in the WUI and would include the mechanical and manual removal of non-native invasive species. This treatment might include a targeted herbicide treatment to address invasive species resprouts. Restoring these areas to low-growing native vegetation would meet the objectives of removing hazardous fire fuels in the community while restoring ecosystems and increasing biodiversity. Other projects might include thinning a *Eucalyptus* stand and removing ladder fuels to reduce the risk of a crown fire.

Projects that are smaller than the scale of project envisioned for the CalVTP:

While the CalVTP PEIR does not provide a minimum size limit for projects, the level of analysis for the full PEIR process is not easily scaled down for small projects (though these projects would still require CEQA and Coastal Act compliance). Under the PWP, projects in this category would still be designed and analyzed to meet the parameters of the Coastal VTS and all applicable elements of the CalVTP, but would not be approved under the PEIR. For example, a neighborhood *Eucalyptus* removal project along ½ acre of urban or suburban WUI land is too small to warrant inclusion under the PEIR but would prove extremely valuable in reducing flammable vegetative fuel loads in a neighborhood setting. A project like this could be designed to replace non-native vegetation with native species, and would likely require authorization under the LCP. The PWP anticipates these projects would be approved through the NOID process with

creation of a project document and supporting studies that are similar to the PSA and include the relevant measures and standards from the CalVTP and Coastal VTS.

Maximum and minimum intensity of activities proposed to be undertaken

Both Forest Health and Fire Prevention project types will provide fire resiliency benefits in the coastal zone to protect against loss of life, property, and ecosystems from catastrophic wildfire. All projects under this PWP, specifically projects being conducted within ESHAs, will provide ecological benefit, either directly or indirectly, to the greatest extent feasible. In addition, Forest Health projects are explicitly designed to provide direct ecological benefits to local landscapes. Given the nature of vegetation treatment activities, it is recognized that some projects (or portions of projects) cannot be designed to fully meet forest health or ecological restoration standards while also meeting the necessary fire resiliency objectives. For Fire Prevention projects that are not able to include forest health or ecosystem restoration as a primary objective, the project (or portion of project) will be designed to minimize impacts to coastal resources, specifically ESHAs, as required in Project Standards 2 and 3 (see Section IV, below), in consideration of the necessary fire resiliency objectives. To ensure that benefits to the environment are maximized through forest health and ecological restoration planning in the PWP Program Area, the majority of the total acreage of covered projects will be Forest Health projects.

Within each of the project types described above, the CalVTP identifies five specific treatment types that a Project Proponent may utilize to implement projects and meet project goals and objectives. This PWP has been developed to be consistent with the CalVTP, and the maximum and minimum intensity of activity or activities proposed to be undertaken will comply with the analysis, evaluations, and limitations approved as part of the PEIR for the California Vegetation Treatment Program (CalVTP) in January of 2020 (https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-implementation/) except that projects under the PWP may be proposed outside of the geographic area covered by the PEIR. In addition to the CalVTP, all projects undertaken through this PWP will adhere to the Coastal VTS for projects in the Coastal Zone (Exhibit A) and all other Project Standards in Section IV of this Plan. These standards were developed through extensive collaboration between the RCD, local stakeholders, CalFire and Coastal Commission staff.

Minimum and maximum intensity of a given treatment will be based on the project goals and objectives as well as the size and location of a given project. Projects approved under this PWP may include one or many different treatment types and intensities. The five CalVTP treatment types that are proposed for use in projects covered under this PWP include the following:

Prescribed burning:

The application of low-intensity fire onto target vegetation for purposes of ecological restoration and fuel reduction, including pile burning and broadcast burning. Prescribed burns are carried out with appropriate preparation, such as creating a fire line by

removing fuels that will prevent the fire's spread outside of the target area. They are planned and conducted in close coordination with fire personnel and carried out only when weather, air quality, and fuel conditions are optimal. Prescribed burning includes applying fire to coastal prairie to reduce thatch (fuels) and restore native vegetation, and to a low intensity forest understory burn aimed at reducing ground fuels, fire intolerant species, and control the occurrence and spread of sudden oak death.

Mechanical Treatment:

This treatment type focuses on the use of motorized equipment to cut, uproot, crush/compact, or chop existing vegetation. Among a variety of uses, the most common and efficient manner is to utilize this equipment on slopes less than 50% to increase the health and vigor of the forest by reducing competition among vegetation. This type of treatment will also utilize excavators to reach from existing roads, thus reducing competing vegetation adjacent to these roads.

Manual treatment:

This treatment focuses on the use of hand tools and hand-held power tools such as shovels, chainsaws, weedwhackers, or loppers to remove target vegetation. A crew limbing trees and removing ground fuels with chainsaws and loppers to create a shaded fuel break is a common form of manual treatment.

Prescribed herbivory:

This treatment utilizes domestic livestock such as goats, cattle, or sheep to reduce height and density of vegetation. Goats are often deployed to reduce the density and height of brush species, woodlands, and forests with dense understory growth or managed cattle grazing to keep grasslands, oak woodlands, and coastal prairie habitats healthy and less prone to catastrophic or severe fire behavior.

Herbicide application:

Herbicides are applied through ground application methods and used to target specific invasive species when other methods are not feasible due to their costs, effectiveness, or potential environmental impacts. Some applications are applied to new foliar growth of invasive species where uprooting may cause excessive soil disturbance. Other applications target the stumps immediately after the felling of invasive species, such as *Eucalyptus globulus*, to prevent resprouting.

Maximum size of facilities proposed to be constructed pursuant to the PWP and the proposed timetable and any phasing of development activity contemplated.

No new facilities are proposed for construction as part of this PWP.

The RCD will work with local landowners, CalFire, technical advisors, and Coastal Commission staff to prioritize and develop projects that will be implemented over the ten-year period of this PWP. This process is planned through the Regional Prioritization Effort, which is currently underway and led by the RCDs of San Mateo and Santa Cruz Counties together with CalFire and the Coastal Region Prioritization Group. Potential PWP Projects will be phased over the course of the ten-year term and approved through NOIDs that will be submitted to the Commission for approval. NOIDs may include anywhere from one to many projects and NOIDs are expected to be submitted to the Commission between one and three times per year. If implementation of a specific activity/project is delayed due to unforeseen circumstances, the approved project will be automatically put into the queue for implementation the following year.

Projects/activities approved under the PWP will include both an initial implementation phase and subsequent follow-up management at ecologically appropriate intervals. These expected intervals will be clearly spelled out in each PSA submitted as part of the NOID process.

PSAs shall be submitted to the CCC as part of the NOID process for review and approval for the purpose of coastal development authorization prior to conducting projects. Coordination between the project proponent and CCC shall occur as early as feasible in the design process to streamline consistency review under the PWP (see Section VI, for more on administrative processes related to the PWP).

PSAs shall include clear problem and goal statements (e.g., overall project goals, fire prevention goals, ecological goals, etc.) associated with each project proposed pursuant to this PWP and will be submitted as part of the NOID process. These statements are intended to assist project proponents and CCC in developing mutual understanding of the potential impacts and benefits—both short and long term—for each project, and the structure for the problem and goal statements are articulated in the Coastal VTS. It is expected that this information will be incorporated into Standard Project Requirements (SPRs) BIO – 3 (Sensitive Natural Communities) and SPR – BIO – 8 (Identify and Minimize Impacts to Coastal Zone ESHA) of the CalVTP project PSA including the completed VTS document provided in the attachments section of each project PSA.

IV. CalVTP Protective Measures and Coastal VTS

PWP Project Requirements

Please refer to the CalVTP PEIR Program-Level SPRs and Mitigation Monitoring and Reporting Program (MMRP) tables for a full accounting of relevant protective measures that will be implemented for all projects under this PWP. The SPRs can be found in Appendix PD-3 of the CalVTP Final PEIR at (https://bof.fire.ca.gov/projects-and-

programs/calvtp-homepage/calvtp-program-eir/) and the MMRP is located in Appendix B of the Final PEIR, Volume I at (https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage/how-to-use-the-calvtp/). Exhibit B provides a summary of SPRs that are expected to be commonly applied to PWP projects. Due to the fact that most, if not all, projects approved under this PWP will take place in or near ESHAs, project specific PSAs will also provide detailed information that addresses items in the Coastal VTS provided in Exhibit A:

- Protect Ecosystem
- Vegetation Removal Hierarchy
- Limit Equipment Types
- Limit Herbicide Use
- Prescribed Herbivory Use
- Control Invasive Species
- Limit Fencing
- Accelerants
- Soil Stabilization
- Protect Coastal Public Access and Recreation

PWP Project Standards

Project Standard 1. Qualifying PWP Projects

Projects subject to this PWP shall be limited to Forest Health and Fire Prevention projects, as those terms are defined in the Coastal VTS and undertaken within the PWP Project Area (Map #1, above) over the next ten years from the date of PWP certification.

Project Standard 2. Consistency with the CalVTP PEIR:

PWP projects shall be fully consistent with the requirements of the CalVTP PEIR, including the SPRs and mitigation measures of the CalVTP PEIR, except where more specifically addressed in Project Standard 3. These CalVTP PEIR measures include, but are not limited to:

- Administrative Standard Project Requirements, SPRs AD-1 through AD-9
- Aesthetic and Visual Resource Standard Project Requirements, SPRs AES-1 through AES-3 and Mitigation Measure AES-3
- Air Quality Standard Project Requirements, SPRs AQ-1 through AQ-6 and Mitigation Measure AQ-1
- Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements SPRs CUL-1 through CUL-8 and Mitigation Measure CUL-2
- Biological Resources Standard Project Requirements, including Special Status Plants, ESHAs, Invasive species, & Wildlife SPRs BIO-1 through BIO-12 and Mitigation Measures BIO-1a, BIO-1b, BIO-1c, BIO-2a, BIO-2b, BIO-2c, BIO 2d, BIO-2e, BIO-2f, BIO-2g, BIO-3a, BIO-3b, BIO-3c, BIO-4, & BIO-5

- Geology, Soils, and Mineral Resource Standard Project Requirements, SPRs GEO-1 through GEO-8
- Greenhouse Gas Emissions Standard Project Requirements, SPR GHG-1 and Mitigation Measure GHG-2
- Hazardous Material and Public Health and Safety Standard Project Requirements, SPRs HAZ-1 through HAZ-9 and Mitigation Measure HAZ-3
- Hydrology and Water Quality Standard Project Requirements, SPRs HYD-1 through HYD-6
- Noise Standard Project Requirements, SPRs NOI-1 through NOI-6
- Recreation Standard Project Requirements, SPR REC-1
- Transportation Standard Project Requirements, SPR TRAN-1
- Public Services and Utilities Standard Project Requirements, SPR UTIL-1

A summary of key SPRs from the CalVTP are attached to this PWP as Exhibit B.

Project Standard 3: Coastal VTS

Projects shall be fully consistent with the Coastal VTS attached as Exhibit A.

Project Standard 4: Project and Program Monitoring

Monitoring for each PWP project shall occur consistent with all specified CalVTP monitoring requirements. In addition, five years following certification of this PWP, the San Mateo RCD shall prepare a five-year programmatic review identifying at a minimum: the status of individual Projects implemented under the PWP, as well as Projects expected to be implemented under the PWP; level of program completion (e.g., number of acres treated, high-priority areas for the subsequent five years, collective monitoring results, constraints and lessons learned, and program success). The programmatic review shall be submitted to the Coastal Commission and San Mateo County. At the ten year mark following certification of the PWP, a final programmatic review shall be prepared by the RCD and submitted to the County and the Coastal Commission for review.

V. Local Planning Context

The San Mateo County Board of Supervisors and the California Coastal Commission approved the San Mateo County Local Coastal Program (LCP) in 1981. In June of 2013, the County Planning Department published the most recent update to the LCP that includes all of the approved amendments through 2012 as well as the Mid County Land-Use Plan Area. The RCD has reviewed this document and The San Mateo County Planning Department collaborated in development of this PWP. The PWP has been designed to meet the requirements of the LCP. As such, future Forest Health and Fire Resilience projects within the Coastal Zone and approved under this PWP, are not expected to require additional approvals from the San Mateo County Planning

Department. This PWP does not currently include treatment activities within the Half Moon Bay or Pacific LCP areas.

VI. Summary of Girl Scouts of Northern California Camp Butano Creek PSA

Forested landscapes and ecosystems are undergoing significant change as the climate warms, forest health declines as a result of sudden oak death, and altered fire regimes and increased fuel loads lead to more catastrophic wildfires. The Girl Scouts of Northern California Camp Butano Creek is one specific project that will be implemented under this PWP and that is intended to be an integral component of the PWP, pursuant to 14 Cal. Code Regs Section 13358. The full PSA for this project will be provided with the locally-adopted PWP that will be submitted to the Coastal Commission for certification in the summer of 2021.

The Camp Butano Creek property is comprised of forests dominated by predominately second growth coastal redwood, Douglas-fir, and mixed hardwood forests. The redwood forest still holds ecologically resilient characteristics from the past with scattered old growth trees and remnants of a time when the understory was more diverse. The lack of fire, until recently, and a reduced large scale stewardship effort of this property in the last 30 years, coupled with changing climates has left the majority of the property severely over stocked in the understory and mid-range tree diameters. The property experienced a low to moderate severity burn during the 2020 CZU Lightning Complex, which killed much of the understory but did not fully consume vegetative fuels, leaving an overstocked dead and dried understory with a component of regenerated vegetation.

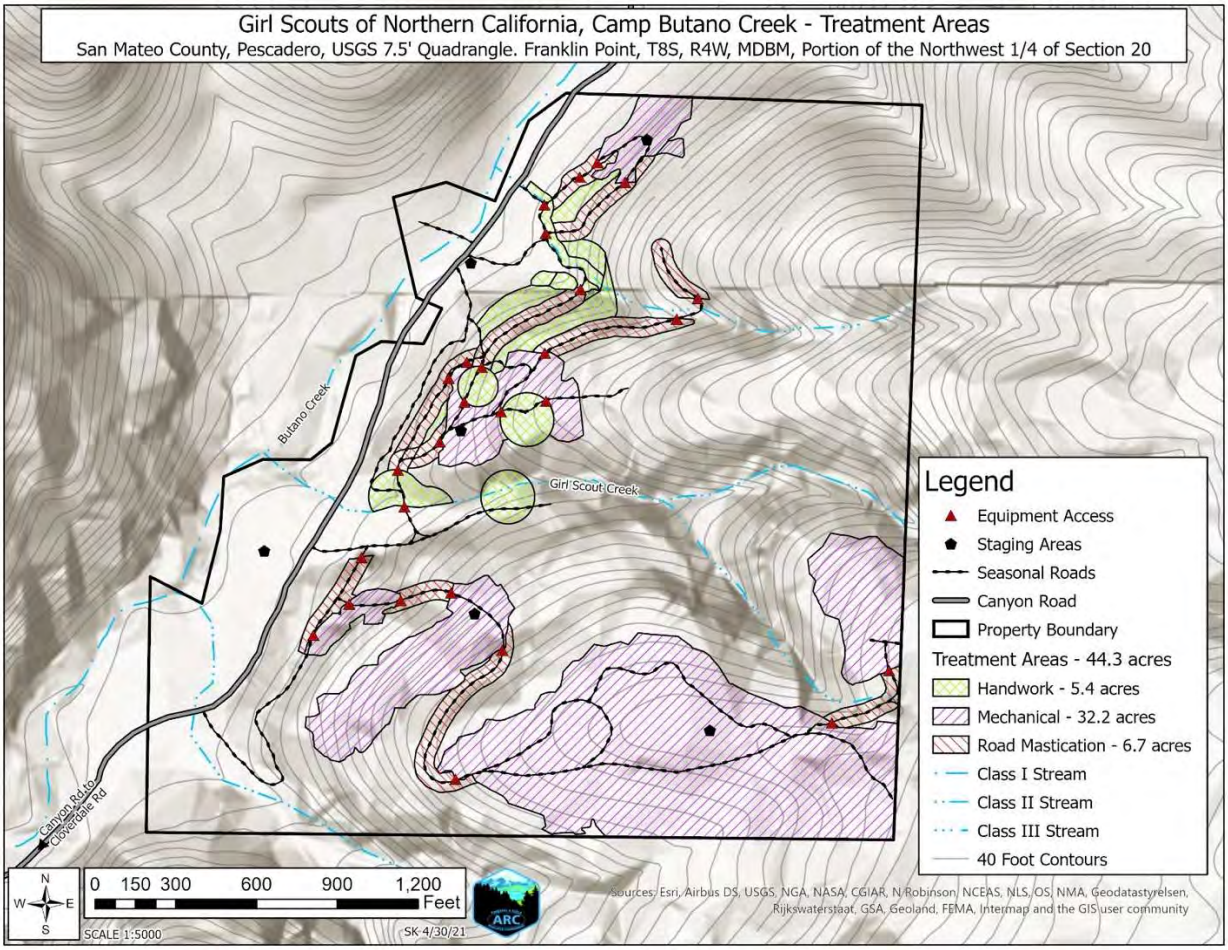
Project treatments will include mechanical mastication and manual treatments to treat understory vegetation, dead or downed material, hazard trees, dead, dying, and diseased trees, and live trees up to 8 inches diameter at breast height (DBH) over approximately 44 acres of forestland (Map 5). The project treatment areas are predominately located in proximity to critical camp infrastructure and areas of declined forest health resulting from sudden oak death, invasive species, and the CZU Lightning Complex. Mechanical treatment areas are predominately located along ridges on slopes less than 40% with a component of reducing vegetative fuels along existing road infrastructure.

The implementation of the proposed treatments will result in a modification of the existing fuels that will ultimately support native vegetative species regeneration and restore habitat conditions including, but not limited to habitat quality and natural fire processes. Specifically, the ecologically restoration outcomes expected to be realized for the redwood forest at Camp Butano include: increased sunlight through the canopy to release a more vigorous and diverse understory; forest structure reduced approximately 300 – 400 stems per acre to approximately

200 stems per acre allowing mid-range and larger diameters redwood trees to extend their heights and expand their crowns becoming more vigorous to resist vegetation pattern transformations in the face of a climate change and increase the separation of ladder fuels from tree crowns ultimately reducing the severity of wildfire.

In addition, fuel reductions in the WUI will directly benefit communities and assets at risk, serving as emergency access points along or near evacuation routes for the nearby communities and as an opportunity to slow or stop wildfires. Habitat quality will be enhanced through WUI fuel reductions where existing habitat has been degraded due to invasive species encroachment or the accumulation of fuels. Ultimately, ecologically restorative outcomes expected from this project include the release of a healthier, more vigorous and diverse understory and more resilient residual forest stand.

The PSA for this project is being reviewed by the RCD, CalFire, San Mateo County Planning Department, and Coastal Commission staff to ensure that it both meets the criteria for inclusion under the CalVTP PEIR and this PWP.



Map 5: Camp Butano Creek Project Treatment Areas Map. Map not to scale.

VII. Administration, Approval Process & Program Review

The purpose of this chapter is to set forth procedures for reviewing and authorizing Projects contained in the San Mateo RCD's Forest Health and Fire Resilience PWP for vegetation treatment in the coastal zone that is carried out pursuant to the Board of Forestry's final PEIR for the CalVTP.

Roles and Responsibilities

This PWP will help expedite implementation of a series of projects in a comprehensive and coordinated manner to help meet the state's vegetation treatment goals outlined in the CalVTP. As part of this effort, two primary actors will participate in the PWP process; their roles and responsibilities are as follows:

i. The CCC shall be responsible for reviewing and acting on the PWP and any amendments to it, as well as all PWP components, including reviewing and acting on the draft and final Project-Specific Analyses submitted as part of the NOIDs, reviewing and acting on all related NOIDs, enforcing NOID (Project) conditions, and reviewing monitoring reports.

ii. The RCD shall be responsible for drafting the PWP and any amendments, releasing them for public review, and approving them at the local level, as well as preparing all proposed NOID (Project) components, including drafting Project-Specific Analyses, public noticing of NOIDs, submitting NOIDs to the Commission, and preparing and submitting any other Project materials to the Commission. The RCD shall, through contractual agreements with other agencies, landowners, contractors and others, initiate individual Projects in coordination with Coastal Commission and county staff and in compliance with the PWP and CalVTP PEIR. The RCD shall be responsible for monitoring of Project conditions. The RCD will partner with other agencies, landowners, contractors and others to implement the responsibilities above and shall maintain oversight to confirm that all work is consistent with the PWP and NOID processes.

Procedures for PWP Filing and Certification[7]

A PWP is a land use planning document that plans for and sets a framework for implementing a specific public works project or array of public works-related activities. A PWP provides a land use planning alternative to LCPs for obtaining approval of large or phased public works projects, as well as any development proposed by a special district, and remains under the authority of the Coastal Commission irrespective of coastal permit jurisdictional boundaries. A PWP is an alternative to project-by-project review for public

[7] For the sake of convenience and clarity, this section summarizes relevant statutory and regulatory requirements that apply to the adoption, amendment, and implementation of PWPs. However, it in no way modifies those requirements or locks the currently existing statutory and regulatory provisions in place.

works, which would otherwise require multiple coastal development permits for different components of the public works project. A PWP must be sufficiently detailed regarding the size, kind, intensity, and location of development to allow the Coastal Commission to determine its consistency with the policies in Chapter 3 of the Coastal Act (pre-LCP certification) or the certified LCP (post-LCP certification). Once the Coastal Commission certifies a PWP, no coastal development permit is required for development that is consistent with the PWP. Instead, the Project Proponent (in this case, the RCD) provides a NOID to the Coastal Commission and other interested persons. The Coastal Commission then reviews the NOID for consistency with the approved PWP; if the Coastal Commission determines that the proposed development described in the NOID is consistent with the PWP, the development may proceed.[8] If the proposed development is not consistent with the PWP, the Coastal Commission will apply conditions to that specific project to achieve consistency with the PWP. If the NOID describes development that is not within the scope of the PWP, the Commission will not accept the NOID for filing, and the Project Proponent will need to obtain a PWP amendment before proceeding with it.

Prior to the filing of a PWP for certification by the Coastal Commission, and pursuant to Coastal Act Section 30503 and Sections 13353.5 and 13515 of the Commission's regulations, maximum opportunities for public participation must be afforded. A public review draft PWP must be made available to the public at least six weeks prior to local adoption of the PWP, including by posting the public draft PWP to the local government's or RCD's website and by transmitting it to: members of the public; each local government contiguous with the area subject to the PWP; local governments, special districts, or port or harbor districts that could be directly affected by or whose development plans should be considered in the PWP; relevant regional, state and federal agencies; and local libraries and media. Posting can be done through electronic means and does not need to be conducted via hardcopy. Further, pursuant to Section 13515(d) of the Commission's Regulations, the RCD must provide notice of the local hearing on the public draft PWP "not less than ten (10) working days before the hearing". The hearing should also be scheduled for a specific time and, when feasible, the hearing should be held in the coastal zone or in a place easily accessible to residents of the coastal zone.

The Public Draft of this PWP is being released on May 6, 2021 for public review and comment, which will continue throughout the Coastal Commission review and authorization process. The draft document will be distributed for public review and comment for six (6) weeks, during which time public comment is solicited.

Section 30605 of the Coastal Act allows PWPs to be submitted to the Coastal Commission for review in the same manner prescribed for the review of LCPs as set forth in Chapter 6

[8] The Coastal Commission PWP review and approval process is not intended to supplant the review processes required of RCD or agencies other than the Coastal Commission by the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA) or other regulatory schemes; compliance with the CEQA, NEPA and/or other regulatory schemes are addressed at the project level, such as the CalVTP Program Environmental Impact Report.

(commencing with Section 30500 of the Coastal Act). Sections 13371 and 13356(b)(2) of Commission's Regulations require that the Coastal Commission not approve or adopt a PWP unless it finds that there are no feasible alternatives or feasible mitigation measures available that would substantially lessen significant adverse impact that the development may have on the environment. Section 21080.5(a) of CEQA, Section 30605 of the Coastal Act, and Section 13355 of the Commission's Regulations also require the distribution of environmental information sufficient in detail to enable the Coastal Commission to determine the consistency of the plan with the policies of the Coastal Act or LCP, as applicable.

The Board of Forestry has prepared the CalVTP Final PEIR (November 2019) to evaluate the potential environmental impacts of the proposed CalVTP treatment activities undertaken across the state. The Coastal Commission's environmental analysis for this PWP may draw on facts from the CalVTP PEIR. However, the Coastal Commission has the authority and duty to conduct its own review of the PWP, any amendments, and any Project-specific NOIDs under the Coastal Act. Such review will also satisfy any obligations to conduct CEQA review under its certified regulatory program.

This PWP provides for a ten (10) year period in which Projects may be carried out consistent with the provisions of the PWP. The Commission may grant an extension to this timeframe through a future PWP amendment if the Commission determines that additional time is warranted and that the amendment is consistent with Coastal Act and relevant LCP requirements at that time.

In the event that the PWP needs to be amended following its certification by the Commission, Sections 13365 – 13371 of the Commission's Regulations govern the process for such amendments. Section 13366 of the Regulations requires the RCD (or applicable local government) "to demonstrate that a public hearing at the local level has been held on the proposed amendment within a reasonable time prior to submission of the amendment application to the Commission" consistent with the standards of Section 13353.5 of the California Code of Regulations. Pursuant to Section 13367, a PWP amendment application shall be rejected if it would "lessen or avoid the intended effect, or any conditions, of a certified public works plan." If accepted, the PWP amendment application would be noticed and scheduled for hearing as either a minor amendment (pursuant to Section 13368) and heard at the next regularly scheduled Commission hearing, or as a regular amendment (pursuant to Section 13369) and processed in accordance with Sections 13370-71. The hearing requirements for review of the PWP amendment would be the same as provided for review of a PWP, as provided in Section 13356. Any amendments will need to be found consistent with Chapter 3 or the Coastal Act or any relevant LCPs, as they exist at that time.

Lastly, after certification of the PWP, the Coastal Commission continues to retain permit jurisdiction over development on tidelands, submerged lands, and public trust lands, whether filled or unfilled, within the RCD's service area. Under the Federal Coastal Zone

Management Act, the Commission also retains federal consistency review authority over federal agency activities and federally licensed or permitted activities on or adjacent to the Project sites. Projects neither covered by the PWP nor located in the Commission's retained permit jurisdiction shall be reviewed by the County of San Mateo for consistency with its certified LCP.

Project Review and Authorization under the PWP

Consistency determinations for individual Projects proposed as part of the PWP are made by the Coastal Commission and are subject to public review and comment and a public hearing. Sections 30605 and 30606 of the Coastal Act and Title 14, Section 13359 of the California Code of Regulations govern the Coastal Commission's review process for development proposed pursuant to a certified PWP. Section 30606 of the Coastal Act requires the public agency (e.g., Special Districts, such as an RCD) proposing the public works Project to provide a NOID to the Coastal Commission (and other interested parties, organizations, and governmental agencies), along with data demonstrating the Project is consistent with the certified PWP. Once a NOID is deemed complete, it is scheduled for a public hearing within 30 working days, at which time the Coastal Commission determines whether conditions are required to bring the Project into conformance with the approved PWP.

For the purpose of submitting a NOID for an individual Project, the RCD shall comply with the following procedures and prepare the following documents:

i. Project Development: Prior to starting the Draft PSA, the RCD shall initiate discussion of a proposed Project with Coastal Commission staff by providing the Project location and scope and detailing the anticipated benefits and impacts of the Project, including expected impacts to coastal resources and potential SPRs and mitigation measures. In addition, and where required by the County LCP, the RCD shall submit to the County Planning Agency a list of all proposed projects recommended for planning and implementation during the ensuing fiscal year for review by the County.

ii. Site Visits: To the extent feasible, the RCD, local government(s), and relevant Commission Staff shall visit the areas proposed for vegetation treatment prior to the drafting of Project-Specific Analyses, as specified below. At a minimum, Coastal Commission staff shall provide preliminary comments on proposed Projects to identify potential issues of concern or suggest Project alternatives to explore.

iii. Draft Project-Specific Analysis (PSA): the RCD shall oversee the drafting of a Project-Specific Analysis for each Project as required by the CalVTP PEIR. The Draft PSA shall be completed in accordance with the requirements of the CalVTP PEIR to determine whether the Project qualifies as within the scope of the PEIR, or that the Project will not result in any new or substantially more

significant impacts than as described in the PEIR or CalVTP. For Projects that fall outside the treatable landscape or for projects that are too small in scope to warrant use of the PEIR for CEQA compliance[9], Project Proponents will be required to develop all relevant sections of the PSA and a description of how the Project adheres to the Coastal VTS in order to be included under this PWP. All PSAs will include the following:

a. a description of the proposed Project, including a narrative description of the size, kind, intensity, and location of each proposed development and the supporting site plans and elevations thereof;
b. environmental documentation for the Project(s) including information and CEQA discretionary actions prepared pursuant to or in addition to the CalVTP PEIR, and an analysis of alternative locations for each proposed development activity, if warranted, due to significant impacts on ESHAs or other coastal resources that could be avoided or minimized by implementing in a different location;
c. all technical reports associated with the Project(s) (i.e., biological reports, geotechnical reports, traffic analyses, etc.), including all reports and plans required by the PEIR and PWP;
d. the results of consultation with parties interested in, with jurisdiction over, and/or affected by the Project(s), including consultations with concerned public entities and agencies and any additional consultation that might be required or needed;
e. all implementing mechanisms associated with the Project(s) (including but not limited to CEQA mitigation monitoring reports, legal documents, landowner authorization, etc.); and,
f. all public comments received regarding the Project(s).

iv. Final Project-Specific Analysis: Following review of the Draft Project-Specific Analysis by Commission staff and other interested parties, the RCD shall prepare a Final PSA for each Project as required by the CalVTP PEIR that incorporates requested revisions and includes the components required under the Draft PSA (Section iii above). The Final PSA (or relevant sections, if a project will not be utilizing the PEIR for CEQA compliance) shall be completed in accordance with the requirements of the CalVTP PEIR to determine whether the Project qualifies as within the scope of the PEIR and shall comply with the Coastal VTS.

v. Preparation and Submittal of a Notice of Impending Development: Following development of the Final PSA, or in conjunction with preparation of the Final PSA, the RCD shall prepare a Notice of Impending Development (NOID) for each Project or batch of Projects for Commission review and approval

[9] Projects that are deemed too small for inclusion in the CalVTP PEIR will still be required to comply with CEQA through project specific Categorical Exemptions, Negative Declarations, or other appropriate review.

consistent with the PWP. Unless there are unusual or exigent circumstances, the RCD shall give advanced written notice to the CCC Executive Director of its intent to submit a NOID prior to submitting the NOID. The RCD shall coordinate with the Executive Director to ensure that a NOID is not submitted at a time when it would be legally infeasible for the Commission to bring the item to hearing within 30 working days from being submitted and filed as complete (e.g., when the Commission is not holding a hearing in a particular month). The NOID shall adhere to and include the following procedures and materials:

a. Mailed/Emailed Notice. At least 30 working days prior to undertaking development activities, the RCD shall give written notice of its intent to implement a Project by submitting a NOID. The RCD shall send the NOID via first-class mail, e-mail, or other reasonable means, to the following persons, parties and agencies: the Coastal Commission's Executive Director; owners of record of each property within 100 feet (excluding road rights-of-way) of the proposed Project(s); persons residing on properties located within 100 feet (excluding road rights-of-way) of the proposed Project(s), as well as those persons residing in greater distances that may need to be noticed pursuant to the CalVTP SPRs and mitigation measures; all local governments and special districts that could be affected; all regional, state, and federal agencies that may have an interest in or be affected; all other persons, parties, and agencies who have requested to receive such notice, either for the Project(s) that is the subject of the notice or for all PWP Projects; and persons, parties, and agencies that are known by the RCD to be interested in the specific Project(s) that is the subject of the notice (e.g., persons, parties, and agencies that submitted testimony or other comments during the CEQA/NEPA process for the PWP). The RCD should also post the NOID on its website in a downloadable format.

b. Notice Content. The NOID shall be clearly titled as such and shall, at a minimum, include the following information:
    i. The description of the proposed Project(s), including a narrative description of the size, kind, intensity, and location of each proposed development as well as an identification of the existence of the Final PSA, including the existence of supporting materials and documentation (e.g., maps, technical documents, etc.), and information regarding where and when the NOID and supporting material is available for public review (including where the Final PSA and supporting materials and documentation can be downloaded);

ii. The RCD's approval of the Project(s), including any locally-adopted resolutions or identification numbers for filing purposes if available;
iii. The anticipated date of commencement of development of the Project(s);
iv. The appropriate RCD contact person(s) and her/his contact information;
v. The process for Coastal Commission review of the Project(s) (including Coastal Commission contact information and proposed Commission date of action on the NOID).

c. Posted Notice. The RCD shall post the NOID in conspicuous locations at the proposed Project(s) site(s) no later than the date that the NOID is sent pursuant to Section v.a above, (i.e., at least 30 working days prior to commencement of development activities). The Notice shall comply with the following requirements:
    i. Notices that are posted shall be printed, clearly visible, and laminated or otherwise weatherproofed so as to be legible at all times.
    ii. Notices shall be posted at locations on the perimeter (and/or within the perimeter as appropriate) of the proposed Project site where the site intersects public use areas (streets, paths, parking lots, etc.). Where Project sites do not contain intersections with public use areas, at least one notice shall be posted at the Project site entryway. Notices shall also be posted at the RCD office and sent to the Coastal Commission's Central Coast District office for posting.
    iii. Notices shall indicate that a NOID has been submitted to the Coastal Commission for the proposed development and shall contain a general description of the nature of the proposed development, as well as Coastal Commission contact information and the date of proposed Commission action on the NOID.
    iv. Notices that do not meet the criteria listed above, that otherwise become illegible, or that otherwise are not visible to pedestrians or disappear (for whatever reason) shall be replaced. All notices shall remain posted until the effective date of authorized commencement of development.

d. Supporting Materials. Supporting information sufficient to allow the reviewer to determine whether the proposed Project is consistent with the certified PWP shall accompany the NOID sent to the Executive Director. At a minimum, the supporting information shall include:
    i. the Final PSA;

ii. any final authorization documents from the RCD (e.g., resolutions, minute orders, certifications, etc.) not included in the Final PSA;
iii. copies of all public comments received regarding the proposed PWP Project;
iv. the proposed method of financing the activity, including any grants provided by a public entity; and
v. for the Executive Director only: (a) A mailing list with names and addresses for each of the persons, parties, and agencies listed in Section v.a above, where the list is labeled and organized by each of the categories listed; (b) One set of plain (i.e., unadorned with no return address) regular business size (9½ inches by 4⅛ inches) envelopes stamped with first class postage (metered postage is not acceptable) addressed to each of the listed addressees from Section v.a , above, for each Commission hearing (if applicable) on the matter (i.e., if there are multiple Commission hearings on the matter, then multiple envelope sets shall be provided as directed by the Executive Director); alternately, the RCD may provide a combination of valid email addresses, media, and envelopes in a manner acceptable to the Executive Director of the Coastal Commission to ensure transmittal of the Commission hearing notice to all parties in section v.a, and, (c) Evidence that the Notice of Impending Development has been posted pursuant to the parameters of Section v.c, above, (e.g., a site plan with the notice locations noted and/or photos of the notice locations attached).

Projects submitted and authorized under the certified PWP may also be considered by the Commission *concurrent with* PWP filing and certification. Section 13358 of the Commission's Regulations states that "If a proposed project intended to be undertaken pursuant to a public works plan is submitted to the Commission for a development permit concurrent with the submittal of a public works plan, the Commission shall review the project and the plan concurrently, and shall, if the project meets the requirements of the Coastal Act, approve the project as an integral component of the public works plan. The Commission shall require conditions, where necessary, to bring the project into conformance with the Coastal Act." Accordingly, Projects may be authorized via the PWP either by submitting NOIDs to the Coastal Commission for review following certification of the PWP, or by including the Projects as integral components of the PWP and approving them concurrently with the certification of the PWP.

Any proposed Development that is exempt from permitting requirements pursuant to Section 30610 of the Coastal Act and Sections 13250 – 13253 of the Commission's regulations is also exempt from needing to obtain any authorization through the NOID process. Likewise, consistent with Sections 13250 – 13253 of the Commission's regulations, Development that would be exempt except for its location in a sensitive area

—such as repair and maintenance work taking place in environmentally sensitive habitat area—requires authorization through a NOID.

Coastal Commission Review of PWP Components, Including NOIDs

The Coastal Commission shall review Project(s) for consistency with the PWP in accordance with the procedures of this Section.

i. Filing the NOID

Consistent with 14 CCR Sections 13357(a)(5), 13359(a), and 13353-13354, unless there are unusual circumstances, within five working days of receipt of the NOID and all applicable supporting information of the Project(s), the Executive Director shall review the submittal and shall determine whether additional information is necessary to determine if the proposed Project(s) is/are consistent with the PWP, and if additional information is deemed necessary, shall request such information from the RCD.

a. The NOID shall only be deemed filed if the Executive Director determines that the information supplied is consistent with the information requirements of Coastal Act Section 30606 and 14 CCR Sections 13357(a)(5), 13359(a), 13353, and 13354 and is sufficient to allow the Commission to determine whether the proposed Project is consistent with the certified PWP.
b. If the Executive Director has requested additional supporting information needed to determine consistency with the PWP, then the Notice shall be deemed filed when the Executive Director determines that all necessary supporting information has been received.

ii. Coastal Commission Hearing Deadline

Consistent with 14 CCR Sections 13357(a)(5) and 13359, the thirtieth working day following the day the NOID is deemed filed is the Hearing Deadline. The Hearing Deadline may be extended if, on or before the Hearing Deadline, the RCD waives its right to a hearing within thirty working days and agrees to an extension to a date certain, no more than three months from the Hearing Deadline, to allow for Commission review of the proposed Project(s) at a later hearing.

iii. Coastal Commission Review and Determination of Consistency with PWP

The Executive Director shall report in writing to the Commission regarding any pending proposed Project(s). The Coastal Commission shall review the proposed Project(s) at a scheduled public hearing prior to the Hearing Deadline.

The Executive Director's report to the Commission shall include a description sufficient to allow the Commission to understand the location, nature, and extent of the Project(s), and a recommendation regarding the consistency of the proposed Project(s) with the certified PWP. On or before the Hearing Deadline the Commission shall make one of the following determinations:

a. Determine that the proposed Project(s) is/are consistent with the certified PWP, or
b. Determine that conditions are required to render the proposed Project(s) consistent with the certified PWP, including identification and adoption of the required conditions.

Following the Commission's determination, the Executive Director shall inform the RCD of the Commission's determination and shall forward any conditions associated with it. If the Commission has identified conditions required to render the Project(s) consistent with the PWP, development shall not be undertaken until the conditions have been incorporated into the Project(s).

Coastal Commission review of a proposed Project(s) shall be deemed complete on the date of a Commission determination that the Project(s) is/are consistent with the PWP with or without conditions.

Upon completion of Commission review, the RCD may commence with Project activities provided that any conditions imposed by the Commission to render the Project(s) consistent with the PWP have been incorporated into the Project(s).

iv. Effective Date and Expiration Date of PWP Authorizations; Extension of Authorizations

Unless expressly stated otherwise in the approval documents, the effective date of a Project authorization shall be the date the Coastal Commission's review of the proposed Project is deemed complete pursuant to Section iii, above.

Unless expressly stated otherwise in the approval documents, the expiration date of a Project authorization pursuant to this PWP shall be three years following its effective date. Thereafter, implementation of the Project may not commence unless the authorization has been extended as provided herein, or a new authorization and review by the Commission has been completed in accordance with PWP provisions for initial review of a proposed Project.

Monitoring Requirements

Following implementation of individual Projects under the PWP, the RCD shall provide monitoring reports in accordance with the requirements (i.e., SPRs and Mitigation Measures) of the CalVTP PEIR. The RCD shall maintain a record of monitoring reports in their office, which shall be made available for public review. The RCD shall submit a copy of each monitoring report to the Executive Director within ten days of its completion.

Enforcement

In addition to all other available remedies, the provisions of the PWP, NOID authorizations, and the Coastal Act shall be enforceable pursuant to Chapter 9 of California Public Resources Code Division 20. Any person who performs or undertakes CalVTP-related activities inconsistent with the PWP, any NOID issued pursuant thereto, or the Coastal Act, or who fails to act as required by the PWP, a NOID or the Coastal Act, may, in addition to any other penalties or remedies, be subject to (i) an order pursuant to Public Resources Code Sections 30809, 30810, 30811, or 30812 or (ii) civil or administrative liability in accordance with the provisions of Public Resources Code Sections 30820, 30821, 30821.6 and 30822.

The RCD shall require that CalVTP-related activities are consistent with the PWP and with the terms and conditions of NOID authorizations issued pursuant to the PWP. The RCD shall investigate in a reasonable time allegations regarding CalVTP-related activities being undertaken inconsistent with the provisions of the PWP or NOID authorizations, and shall attempt to resolve any such inconsistencies discovered. In the event inconsistencies are not resolved, the RCD will report to the Executive Director or the Coastal Commission, who are authorized to enforce the terms of the PWP, NOIDs, and the Coastal Act.

PWP Programmatic Review

Five years following certification of this PWP, the RCD shall prepare a five-year programmatic review identifying at a minimum: the status of individual Projects implemented under the PWP, as well as Projects expected to be implemented under the PWP; level of program completion (e.g., number of acres treated, high-priority areas for the subsequent five years; collective monitoring results; constraints and lessons learned; and program success). The programmatic review shall be submitted to San Mateo County and the Coastal Commission. At the ten year mark following certification of the PWP, a final programmatic review, shall be prepared by the RCD and submitted to the County and the Coastal Commission for review.

VIII. Glossary of Terms

“California Coastal Commission” and “Coastal Commission” and “Commission” mean the California Coastal Commission.

“California Vegetation Treatment Program” and “CalVTP” mean the vegetation treatment activities and associated environmental protections developed by the Board of Forestry to reduce the risk of loss of lives and property, reduce fire suppression costs, restore ecosystems, and protect natural resources as well as other assets at risk from wildfire. The CalVTP supports the use of prescribed burning, mechanical treatments, hand crews, herbicides, and prescribed herbivory as tools to reduce hazardous vegetation around

communities in the WUI, to construct fuel breaks, and to restore healthy ecological fire regimes.

“California Vegetation Treatment Program Environmental Impact Report” and “CalVTP PEIR” and “PEIR” mean the certified, final environmental impact report that evaluates the environmental impacts of the CalVTP in accordance with the California Environmental Quality Act (CEQA) and was certified by the Board of Forestry on December 30, 2019, which is available here.

“Coastal Vegetation Treatment Standards” and “ Coastal VTS” mean the final forest health and fire prevention standards developed by the Coastal Commission and San Mateo and Santa Cruz County RCDs, for the purpose of providing additional standards to or clarification of PEIR Standard Project Requirements (SPRs) for Projects in the coastal zone that fall within the scope of the PEIR.

"Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511). As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

“Executive Director of the Commission” and “Executive Director” mean the Executive Director of the CCC or his/her designee.

“Mitigation Measures” mean the measures certified in the CalVTP PEIR, or additional measures required by the Coastal Commission, to prevent, reduce, or offset adverse environmental effects of a Project.

“Notice of Impending Development” and “NOID” mean a notice of a Project Proponent’s intention to implement one or more of the Projects contained in the PWP, which notice shall be provided by the RCD to the Coastal Commission and to others, as required by this chapter of the PWP.

"Project" means a development component included in the PWP, which requires submittal of a Project-Specific Analysis or relevant sections of the PSA for projects that do not fit within the CalVTP PEIR and Notice of Impending Development, as well as incorporation of CalVTP PEIR Standard Project Requirements and Mitigation Measures, as well as Coastal VTS.

"Project Proponent" means a public agency providing funding for vegetation treatment or with land ownership, land management, or other responsibility in the treatable landscape and seeking to implement vegetation treatments (i.e., Projects) consistent with the PEIR for CEQA compliance, as defined by the CalVTP PEIR. Under this PWP, the San Mateo RCD is the Project Proponent.

"Project-Specific Analysis" and "PSA" mean the process developed as part of the CalVTP PEIR for Project Proponents to evaluate each vegetation treatment project intended to implement the CalVTP PEIR to determine whether the activity qualifies as 'within the scope' of the PEIR or requires additional environmental documentation or its own independent environmental review.

"Public works" means (a) all production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for energy facilities; (b) all public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities and (c) all publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any Development by a special district.

"Resource Conservation District" and "RCD" mean a special district established under Public Resources Code Division 9 to conserve resources such as soil and water and that are set up to be locally governed agencies with their own locally appointed or elected, independent boards of directors. RCDs implement Projects on public and private lands and educate landowners and the public about resource conservation.

"Treatable Landscape" means the appropriate CalVTP areas within which to implement proposed vegetation treatments (i.e., Projects) and which were identified by first dividing the State (Fire) Responsibility Area into vegetation types from the California Wildlife Habitat Relationship system and excluding those vegetation types with negligible wildfire risks (e.g., wet meadow, estuarine).

"Standard Project Requirements" or "SPRs" mean the measures required by the CalVTP PEIR that a proposed Project must implement to avoid and minimize environmental impacts and comply with applicable laws and regulations. SPRs are intended to be

implemented and enforced in the same way as mitigation measures consistent with Section 15126.4 of the State CEQA Guidelines.

Exhibit A

Coastal Vegetation Treatment Standards (Coastal VTS) for Projects in the Coastal Zone of San Mateo County

1. All projects shall comply with and carry out the requirements of the CalVTP PEIR, including use of approved treatment methods, treatment activities and all applicable standard project requirements (SPRs).

2. Project-Specific Analyses (PSAs) shall be submitted to the California Coastal Commission (CCC) for review and approval pursuant to the PWP prior to conducting projects. Coordination between the RCD and CCC shall occur as early as feasible in the design process in order to avoid delays.

3. PSAs shall include clear problem and goal statements (i.e., overall project goals, fire prevention goals, ecological goals, etc.) associated with each project proposed pursuant to this public works plan. These statements are intended to assist the RCD and CCC in developing mutual understanding of the potential impacts and benefits – both short and long term – for each project. It is expected that this information will be incorporated into item #6 of each PSA.

4. In the coastal zone, vegetation treatment projects fall into two categories: (1) Forest Health projects and (2) Fire Prevention projects. The purpose of forest health projects is to restore and enhance ecosystems, including to prevent fire behavior to which the ecosystem is not adapted. The ecosystems that can be treated under this category include forested ecosystems as well as other ecosystems such as woodland and scrub dominated systems. The purpose of fire prevention projects is to protect existing structures and infrastructure, including access roads. Fire prevention projects shall be limited to the applicable defensible space requirement (which is typically 100 feet, but can range to as much as 300 feet under specific circumstances), unless accompanied by a clear rationale, provided by a qualified professional, as to why additional defensible space is required to protect existing structures and infrastructure.

5. In the coastal zone, environmentally sensitive habitat area (ESHAs) is defined as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments (see Coastal Act Section 30107.5). Rarity determinations for habitats and species are made by CDFW, USFWS, and CNPS, and are used to support a CCC ESHAs determination.[10] In addition, an ESHA determination may be made on the basis of an area constituting 'especially valuable habitat' where it is of a special nature and/or serves a special role in the ecosystem, such as providing a pristine example of a habitat type or supporting

[10] CDFW defines natural communities, animals, and plants with a global or state ranking of 1, 2, or 3 as rare and the CCC typically finds these to be ESHAs. CCC also typically considers plant and animal species listed by the federal and state endangered species acts (ESA and CESA, respectively) and/or identified under other special status categories (e.g., California Species of Special Concern) and/or identified by the California Native Plant Society (CNPS) as '1B' and '2' plant species as constituting ESHAs.

important ecological linkages. The Coastal Act requires that ESHAs be protected against any significant disruption of habitat values and only allows uses dependent on the ESHA's resources within those areas (see Coastal Act Section 30240). It is anticipated that many of the Forest Health and Fire Prevention activities pursued within the coastal zones of these two counties will take place within natural communities that qualify as ESHAs (e.g., Redwood forest, Monterey Pine forest, Douglas Fir/Tan Oak forest, etc.).

6. In addition to the requirements of the CalVTP PEIR, the following standards shall also be met in the coastal zone:

    - Protect Ecosystem. Forest Health projects shall: (a) proactively restore and enhance ecosystems and forests, protect watersheds, and promote long-term storage of carbon, including through the minimization of forest carbon loss from large and intense wildfires; (b) restore and maintain vegetation cover to a threshold that reflects appropriate fire frequencies (i.e., fire-return intervals) on the landscape, considering estimated pre-European settlement conditions as well as future climate change, and the maintenance or improvement of ecosystem health; (c) maintain vegetation cover and composition to comply with the standards (membership rules) set forth in the second edition of the Manual of California Vegetation (MCV2) to avoid unintended habitat conversion; [11] and (d) provide for a mosaic of appropriate native plants by age, size, and class that support the overall habitat. Fire Prevention projects shall meet all of the above requirements to the maximum extent feasible, while achieving overall project goals and necessary fire prevention goals, and any deviations shall be clearly explained and identified in the PSA.

    - Vegetation Removal Hierarchy. Except for prescribed fire project components, a vegetation removal hierarchy shall be identified and implemented for each project to obtain the vegetation cover threshold identified by a Registered Professional Forester or qualified professional as necessary while ensuring that unintended habitat conversion does not occur and that vegetation cover is sufficient to support the project's ecological goals. In order of priority and application, the hierarchy shall be as follows: (1) thinning and removal of dead, dying and diseased foliage, shrubs (except that some snags should be retained to provide wildlife shelter, dens, etc.); (2) removal of invasive species; and (3) removal of native species that are not listed as endangered, threatened, rare, or otherwise especially valuable, with the end goal of having appropriate species composition in the plant community with a mix of vegetation age, height and density. In all cases, indicator species and diagnostic species appropriate to the habitat type shall be maintained in accordance with the standards (membership rules) set forth by the second edition of the Manual of California Vegetation (MCV2), with the intention of maintaining cover and composition consistent with meeting project ecological goals. For Fire Prevention projects, additional vegetation removal may be allowed if maintaining such vegetation consistent with project ecological goals would result in an unacceptable fire risk to existing structures and infrastructure, and the removal is the minimum

[11] Membership rules are quantitative definitions used to assign field samples to vegetation types based on data analysis and can include species constancy, cover values, and the presence of indicator species.

necessary to protect existing structures and infrastructure. Any such additional removal shall be clearly explained and identified in the PSA. Lastly, if vegetation cover threshold goals, as articulated in the MCV2, cannot be met, then removal of endangered, threatened, rare or otherwise especially valuable species and habitats shall be prohibited unless: such removal is critical to reduce the area's fire risk; removal is accompanied by restoration or enhancement such that the overall project provides net benefits to the habitat; and no other alternative exists that meets the project goals.

- Limit Equipment Types. All projects shall be carried out using the least invasive type of equipment feasible. Projects shall avoid the use of large masticators, track vehicles, and other heavy equipment, where feasible. When such heavy equipment is used, it shall remain on existing roads to the extent feasible. In riparian habitat, the use of heavy equipment shall be prohibited, except when authorized through a valid Stream and Lakebed Alteration Agreement and/or, if applicable, Clean Water Act 401 Certification, and when reviewed and approved by CCC. Projects shall adhere to CalVTP SPR GEO-2 limiting heavy equipment use and SPR HYD-4 prohibiting heavy equipment use in WLPZ except on existing roads.

- Limit Herbicide Use. Herbicides shall be avoided to the maximum extent feasible and may be used only if such treatment activities are the least environmentally damaging feasible alternative and will not result in significant adverse impacts to sensitive ecological resources (e.g., when used to control of invasive species). Projects shall adhere to CalVTP SPRs HAZ-5, 6, 7, 8, and 9.

- Prescribed Herbivory Use. Prescribed herbivory may be allowed if it is found to be the least environmentally damaging feasible alternative to achieving project goals. Prescribed herbivory shall be conducted pursuant to an approved plan that ensures protection of habitat and other coastal resources, as documented in the PSA.

- Control Invasive Species. Treatment activities and treatment types shall limit the spread of invasive species and prevent the spread of plant pathogens in all habitats, including those habitats that are not determined to be sensitive natural communities, riparian habitats, or oak woodlands subject to CalVTP SPRs BIO-4 and 9.

- Limit Fencing. The use of wildlife-friendly fencing for prescribed herbivory activities subject to CalVTP SPR BIO-11 shall require adequate ground clearance for smaller species to avoid entrapment and/or entanglement.

- Accelerants. Accelerants shall only be allowed for use in prescribed fire applications. The use of accelerants that could significantly disrupt or degrade ESHAs is prohibited.

- Soil Stabilization. The use of riprap and/or chemical soil stabilizers that could significantly disrupt or degrade ESHAs is prohibited.

- Protect Coastal Public Access and Recreation. Forest Health projects and Fire Prevention projects shall ensure that coastal public access and recreational

opportunities are preserved during project operations to the maximum extent feasible, including by, but not limited to, minimizing trail closures, limiting the use of public parking spaces for staging operations, posting accessway signage and using flaggers, and designing construction access corridors in a manner that has the least impact on coastal public access. Following the completion of Forest Health projects and Fire Prevention projects, all impacted coastal public access and recreational amenities shall be restored to existing conditions, in a manner that maximizes coastal public access and recreation.

Exhibit B

Summary of CalVTP Standard Project Requirements (SPR) Description/Mitigation/Monitoring The Project Proponent shall perform or cause to be performed the following:			
Administrative Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	
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.	
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.	
SPR AD-4	Public Notifications for Prescribed Burning	At least days prior to the commencement of prescribed burning operations, the project proponent will post signs, publish, send county supervisor notification of prescribed burning operations.	
SPR AD-5	Maintain Site Cleanliness	Project proponent will use fully covered trash receptacles and is required to remove all temporary non-biodegradable flagging.	
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.	
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 Project Specific Analysis, Mitigation and Monitoring Report Form, GIS data, and a post-project implementation report to the Board or CAL FIRE during the proposed, approved, and completed stages of the project.	
SPR AD-8	Request Access for Post-Treatment Assessment	For CAL FIRE projects and public landowners, 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.	
SPR AD-9	Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required	All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP.	

Aesthetic and Visual Resource Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	
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.	
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.	**Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks:** 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.

Air Quality Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	**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. 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. Use renewable diesel fuel in diesel-powered construction equipment. 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 NOX and PM.

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.	
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.	
SPR AQ-4	Minimize Dust	Limit the speed of vehicles. If road use creates excessive dust, the project proponent will wet appurtenant roads or use a non-toxic chemical dust suppressant, remove any soil tracking onto public paved roads, suspend ground disturbing treatment activities outside the project area if particulate emissions cause issues per Health and Safety Code Section 41700.	
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.	
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).	
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
SPR CUL-1	Conduct Record Search	An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures.	
SPR CUL-2	Contact Geographically Affiliated Native American Tribes	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.	**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.
SPR-CUL-3	Pre-field Research	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.	
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.	

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.	
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.	
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.	
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.	
Biological Resources Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	**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.

SPR BIO-1 (cont.)			**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). 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. No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer.
SPR BIO-1 (cont.)			**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.

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.	**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 either the treatment will not being implemented within the occupied habitat or 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.
SPR BIO-2 (cont.)			**Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities):** 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. „ 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.

SPR BIO-2 (cont.)			**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.
SPR BIO-2 (cont.)			**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.

SPR BIO-2 (cont.)			**Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities):** 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 ten 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.
SPR BIO-2 (cont.)			**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.

SPR BIO-2 (cont.)			**Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities):** 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).
SPR BIO-2 (cont.)			**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).

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).	**Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands:** Reference the Manual of California Vegetation, Appendix 2, Table A2, Fire Characteristics (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). 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).

SPR BIO-3 (cont.)			**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.
SPR BIO-3 (cont.)			**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.

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 will 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. 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.	**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). 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. 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.
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. 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).	**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.
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: Clean and sanitize vehicles, equipment, footwear, and clothing, include training, minimize soil disturbance, minimize soil and plant material movement, and clean soil and debris from equipment and sanitize tools.	

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.	
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 (ESHAs).	
Invasive Plants and Wildlife		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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, for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, 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, stage equipment in areas free of invasive plant infestations, 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, treat invasive plant biomass onsite to eliminate seeds and propagules, and implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants.	
Wildlife		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	
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.	

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. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. If an active nest is observed, the project proponent may establish one of the following: Establish a temporary, species-appropriate buffer around the nest, modify the treatment in the vicinity of an active nest to avoid disturbance of active nests, or defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. Trees with visible raptor nests, whether occupied or not, will be retained.	
Geology, Soils, and Mineral Resource Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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).	
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.	
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.	
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. 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.	
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).	

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.	
SPR GEO-7	Minimize Erosion	To minimize erosion, the project proponent will prohibit the use of heavy equipment on slopes steeper that 65%, steeper than 50% where erosion hazard rating is high or extreme.	
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).	
Greenhouse Gas Emissions Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	**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 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.
Hazardous Material and Public Health and Safety Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	

SPR HAZ-2	Require Spark Arrestors	The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors.	
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.	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.
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).	
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.	
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.	
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.	
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, 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.	
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.	

Hydrology and Water Quality Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	
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).	
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, 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, and treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed.	

SPR HYD-4	**Identify and Protect Watercourse and Lake Protection Zones (WLPZ)**	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). buffer distances vary from 50-150 feet depending on stream class and slope. Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. 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. WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. 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. 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. 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.	

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, 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, 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), and no herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.	
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.	
Noise Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation/Monitoring
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).	
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.	
SPR NOI-3	Engine Shroud Closure	The project proponent will require that engine shrouds be closed during equipment operation.	
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.	

SPR NOI-5	Restrict Equipment Idle Time	The project proponent will require that all motorized equipment be shut down when not in use.	
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.	
Recreation Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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 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 information) of the county(is) in which the affected recreation area or facility is located.	
Transportation Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
SPR TRAN-1	Implement Traffic Control during Treatments	Prior to initiating vegetation treatment activities the project proponent will work with the agency(is) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed.	
Public Services and Utilities Standard Project Requirements		SPR Description/Requirement/Mitigation/Monitoring	Additional Mitigation Measures (if applicable)
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.	

Exhibit 2

Girl Scouts of Northern California - Camp Butano Forest Health Project
Project-Specific Analysis

An Addendum to the CalVTP PEIR

Prepared for:

CAL FIRE San Mateo Santa Cruz Unit

In Collaboration With:

San Mateo Resource Conservation District

Girl Scouts of Northern California

JUNE 2021

CALVTP ID: 2021-12

Girl Scouts of Northern California – Camp Butano Forest Health Project
Project-Specific Analysis

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Project Summary

Girl Scouts of Northern California – Camp Butano Forest Health Project

Setting

Wildfires have taken a significant toll on many communities across California. A majority of land managers, researchers, and foresters predominantly agree on the factors that have led to many recent large-scale fires: The outlawing of cultural burning since the late 1800s, restricting fire over the last 100 years, a lack of vegetation management, climate change, periods of successive drought, and significant development into the Wildland-urban Interface. The results of these factors are severely overstocked forests and surrounding vegetation types ripe for wildfire ignition that are in desperate need of treatment.

CEQA and Coastal Act Compliance

The California Vegetation Treatment Program (CalVTP) is a Programmatic Environmental Impact Report that was certified in 2019 as a document compliant with the California Environmental Quality Act (CEQA). This Programmatic EIR offers an array of permittable vegetation treatments that allow for ecological restoration, forest health treatments, and other treatments reducing the risk of wildfire with the submittal of a Project Specific Analysis (PSA). The PSA must demonstrate how the project will comply with Standard Project Requirements and Mitigation Measures from the CalVTP Programmatic EIR.

While the CalVTP provides CEQA compliance for an array of forest health and wildfire prevention projects, the San Mateo Resource Conservation District's (RCD) proposed Public Works Program (PWP) is a companion to the CalVTP that provides a streamlined mechanism for Coastal Act compliance. The PWP requests information on a set of Coastal Vegetation Treatment Standards (CVTS) and details additional information on project design standards for projects within the Coastal Zone. This PSA not only addresses all of the critical components of the CalVTP, but also includes information that responds to the CVTS. The CVTS for Camp Butano Creek (CBC) can be found in Attachment G of this PSA.

Girls Scouts of Northern California – Camp Butano Creek

The Girl Scouts of Northern California CBC, like many other properties in the Santa Cruz Mountains, exhibits unhealthy forest characteristics that set the stage for disease and a significant fire event. This forested stand is densely overstocked in many areas~~parts~~ with tanoak and redwood trees averaging approximately 300-~~exceeding~~ 400 trees per acre, especially in small (1-12 inch in diameter) and some mid-range (12-24 inch in diameter) trees. A healthier, less dense forest stand would be around 200 trees per acre significantly reducing the number of smaller trees.

The stand with 400 trees per acre has very little room to grow and is strained through competition for sunlight, nutrients, and water among so many trees. This creates weaker forest stand conditions where diseases, like sudden oak death, can more easily kill trees and weather driven wildfire can burn very hot impacting larger, healthy trees. The results of a densely overstocked stand are considered impaired forest conditions that require ecologically restorative treatments to reduce competition among trees predominantly removing trees ≤8 inches in diameter. The goal is to

increase healthy growth of larger trees and allow sunlight to reach the forest floor to increase plant diversity, while also reducing ladder fuels and the associated fire hazard. In addition, the 2020 CZU fire burned a majority of the property with a low burn severity leaving behind significant amounts of unconsumed, small, dead tanoaks and brush increasing the potential for future wildfire ignition (see *Figure 1* and *2*).

Figure 1. CBC- Overstocked <8-inch diameter tanoak redwood

Figure 2. CBC - Overstocked <8-inch diameter

Figure 1 and *Figure 2* show the impaired, overstocked forest conditions on CBC that this effort seeks to address. The proposed treatments focus predominantly on mechanized mastication of dead, dying, and diseased understory vegetation and overstocked areas of trees with some handwork in sensitive areas to remove approximately 70-80% of trees ≤8 inches in diameter within the treatment areas. This treatment will reduce competition among the remaining trees, remove ladder fuels, while ensuring that the redwood forest alliance composition per the Second Manual of Vegetation is both maintained and improved. The redwood alliance is described as Sequoia sempervirens >50% relative cover in the tree canopy, or >30% relative cover with other conifers such as Douglas-fir (*Pseudotsuga menziesii)* or with a lower tier of hardwood trees such as tanoak (*Notholithocarpus densiflorus*). This description is the target post-treatment condition.

Equipment Alternatives:

Examples of mechanized and handwork treatments are shown below in *Figures 3, 4, 5,* and *6* from recent projects in San Mateo and Santa Cruz Counties in 2020 and 2019. The San Mateo County treatment was a 90-100% mechanized treatment prescription removal of trees ≤12 inches in diameter which still easily maintained each vegetation type's respective vegetative alliance. The Santa Cruz County handwork treatment prescription was a 70-80% removal of trees ≤8 inches in diameter which also easily maintained each vegetation type's respective vegetative alliance.

Figure 3. San Mateo County – Mechanized – Before

Figure 4. San Mateo County – Mechanized – After

Figure 5. Santa Cruz County – Handwork – Before

Figure 6. Santa Cruz County – Handwork - After

Mechanized: Low-pressure, smaller (<20,000 lb.), tracked excavators and other tracked equipment with mowing heads that can grind smaller trees and understory vegetation into 1-3-inch large chips on slopes ≤40% and spread chips throughout the forest are preferred. The masticator will access treatment areas from existing roads and in a few cases, when moving from one treatment polygon to another, operate on slopes up to 50% for short distances. Please see SPR AD-3 for information regarding consistency with the San Mateo County LCP Policy 9.18 – Regulation of Development on 30% or Steeper Slopes. Resulting mastication will leave a layer of mulch behind to minimize any erosion and suppress weed invasion, while allowing the existing seedbank to germinate beneath, and give cut root systems the opportunity to resprout. Operators working in smaller enclosed air-conditioned cabs are nimbler in the forest, resulting in lower damage to the residual forest stand and increasing worker safety. General production rates average approximately one acre per day, per piece of tracked equipment. Current costs have recently ranged between $2,000 - $4,000 per acre (prevailing wage indicated on the upper end).

Figure 7: Example of Mechanized Equipment

Figure 8: Example of Mechanized Equipment – 315 Excavator

Figure 9: Example of Mechanized Equipment – 299 CAT

Handwork: Consists of conducting physical labor to remove smaller trees (≤8 inches in diameter) and understory vegetation with various hand operated equipment including chainsaws and chippers. This type of treatment is often utilized in sensitive areas around watercourses, steeper slopes ≥40%, near cultural resources, or other key aesthetic areas. Handwork is physically demanding and inherently exposes workers to increased safety risks. General production rates average approximately ½ an acre per day for a crew of approximately 10 people. Current costs have ranged between $9,000 - $18,000 per acre (prevailing wage indicated on the upper end).

Figure 10: Example of Hand Crew – Hand Operated Equipment

Figure 11: Example of Hand Crew – Chipper

The project was designed in a manner to be both cost-effective and responsive to reducing implementation related resource impacts to the greatest extent feasible. Handwork is being utilized in areas where sensitive resources are identified but is not an appropriate alternative for the majority of this project based on safety, cost, and efficiency. Burning was also considered for CBC, but the project area is far too dense with trees and understory vegetation near steep surrounding topography to be considered a safe alternative at this time. In addition, weather windows to conduct prescribed fire are very limited recognizing air quality requirements. Meeting the pace and scale of forest health goals based on our current climatic conditions requires balancing all available tools and techniques that consider, safety, cost, available workforce, efficiency, and environmental conditions~~nsideration~~. The current ~~se~~ conditions require the use of mechanized operations in reasonable locations ~~developed~~ identified through resource analysis and qualified professional evaluation to meet the goals of this project.

Project Justification

Through a collaborative effort between San Mateo RCD, CAL FIRE, and Auten Resource Consulting, the condition of the CBC forest was evaluated and determined to have significant forest health impairments (*Figure 1* and *2*). These impairments occur throughout the forested lands, but the area of focus for this effort is proximal to a well utilized camp and a sub-division to the north called the Butano Creek Subdivision. There is only one way into the camp and community, and one way out from Canyon Road (see *Figure 12~~7~~* map on the next page).

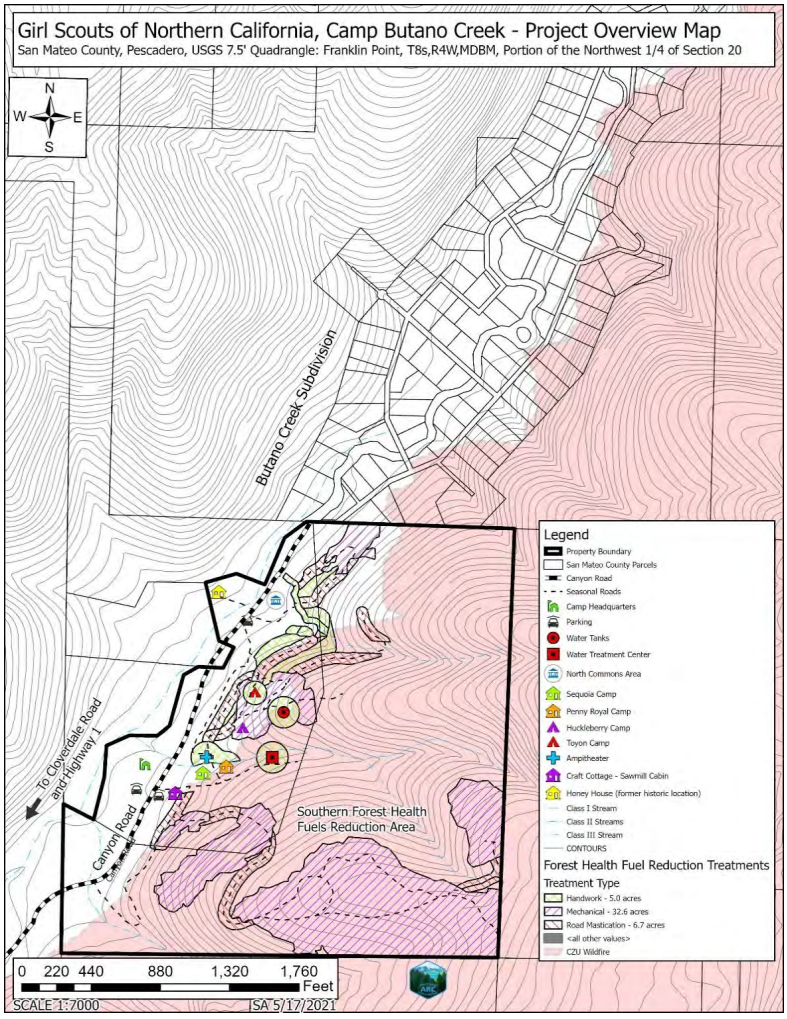


Figure 12~~7~~. Girl Scouts of Northern California – Camp Butano Creek – Project Overview Map (map not to scale, see full scale map in Attachment B, Map 1)

Significant planning went into the CBC Forest Health Project, a CAL FIRE CCI grant, to develop ecologically restorative treatments over 44 acres that also supports treatments in proximity to the Wildland-urban Interface. The CBC treatment area development phase began by analyzing where sensitive resource areas were located (e.g., watercourses, steep slopes, sensitive communities/species, etc.). These areas were initially mapped out until the more treatable ground (e.g., less steep, ridges, and areas away from watercourses, etc.) could be field verified for access, to evaluate the level of impaired forest condition, and consider treatment options. Once this step was

complete, field-verified treatment polygons, some with handwork near sensitive resources, were pieced together until it created a mosaic of forest stand treatments that are economically viable and ecologically restorative, while also promoting community protection to the Girl Scout camp and the Butano Creek Subdivision.

There are many more acres on CBC and the rest of the Santa Cruz Mountains that would benefit from the treatments described in this PSA. Collaborative landscape scale prioritization is happening but is very challenging with so much at risk to communities and resources everywhere. Similarly, prioritization of treatment areas occurred on CBC to balance needed ecologically restorative treatments, protection of sensitive resources, reduction of fuels for community protection, worker safety, and the economic realities of project planning, permitting, and implementation.

Although residents of Canyon Road from the camp and subdivision experienced low severity burn conditions from the 2020 CZU fire, it is possible that a wind driven fire could approach from the south or northeast igniting portions of the canyon where a fire could move up Canyon Road. Implementing ecologically restorative mechanized and manual treatments ~~to create a mosaic of actions~~ along the southern road on CBC and flatter portions of terrain create a Southern Forest Health Fuels Reduction Area (see *Figure 12~~7~~* map). In addition, a mosaic of mechanized and handwork treatments near sensitive resources along the east side of the camp, bound also by the northwest from Canyon Road, create an additional level of potential protection for CBC and the Butano Creek Subdivision in the case of a fire moving up Canyon Road.

These kinds of treatments create an opportunity for CAL FIRE to consider a place to stop a wildfire or manage the fire potentially reducing emergency ground disturbing actions with bull dozers. Techniques such as minimum impact suppression techniques (e.g. setting a fire in controlled conditions to burn up fuel load before the major head of the fire arrives, called back burning) may be utilized in areas where forest health fuel reduction treatments and planning have occurred years ahead of a wildfire. Emergency fire suppression actions can create additional environmental impacts whereas the CBC project and other projects to follow will become part of CAL FIRE's fire planning network to increase fire management opportunities and reduce environmental impacts from severe wildfire or firefighting impacts.

Numerous resource protection measures are outlined in this CalVTP PSA for Camp Butano Creek. These measures provide significant avoidance, minimization, and mitigations, and are thoroughly evaluated in this PSA to understand the full extent of the CEQA-compliance. Key measures among many include: Biological and botanical surveys prior to project implementation, bird nesting surveys (if operations occur from February 1st to August 31st), no road building, mechanized operations on slopes less than 50%, no heavy equipment operations in proximity to a watercourse, canopy and native vegetation requirements, control of invasive exotic species, mitigations to reduce the spread of forest pathogens such as sudden oak death, an archaeological survey report, requirements to follow local policies and public noticing, and a pre-operational meeting with the contractors to advise them of key resource issues.

List of Abbreviations

ASR	Archaeological Survey Report
CAL FIRE	California Department of Forestry and Fire Protection
CalVTP	California Vegetation Treatment Program
CAAQS	California Ambient Air Quality Standards
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CVTS	Coastal Vegetation Treatment Standards
CWHR	California Wildlife Habitat Relationships
CZU	San Mateo Santa Cruz Unit
DBH	diameter at breast height
DTSC	Department of Toxic Substances Control
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Area
FRAP	Fire and Resource Assessment Program
FVS	Forest Vegetation Simulator
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
IAP	Incident Action Plan
IFTDSS	Inter-agency Fuel Treatment Decision Support System
IPC	Invasive Plant Council
LCP	Local Coastal Program
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plans
NWIC	Northwest Information Center
PEIR	Programmatic Environmental Impact Report
PPE	Personal Protective Equipment
PRC	Public Resource Code
PSA	Project-Specific Analysis
PWP	Public Works Plan
RM	Resource Management
RPF	Registered Professional Forester
RTE	Rare Threatened and Endangered Species
RWQCB	Regional Water Quality Control Board
SENL	Single Event Noise Level
SMC	San Mateo County

SMRCD	San Mateo Resource Conservation District
SOD	sudden oak death
SPR	Standard Project Requirement
TMP	Traffic Management Plan
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	vehicle miles traveled
WDR	Waste Discharge Requirements
WLPZ	Watercourse and Lake Protection Zone
WUI	Wildland-urban Interface

THE CALIFORNIA VEGETATION TREATMENT ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1.	**Project Title:**	Girl Scouts of Northern California – Camp Butano Forest Health Project
2.	**CAL FIRE Project Number**	
3.	**CalVTP I.D. Number**	2021-12
4.	**Project Proponent Name and Address:**	CAL FIRE San Mateo – Santa Cruz Unit (CZU) 6059 Highway 9 Felton, CA 95018
5.	**Contact Person Information and Phone Number:**	CAL FIRE Vegetation Management Forester - Sarah Collamer (831)254-1792
6.	**Project Location:**	Butano Creek – Girl Scout Camp 1400 Canyon Rd, Pescadero, CA 94060. USGS – Franklin Point Quadrangle, California, T8S, R4W, MDBM, and Portions of NW ¼ of Section 20. Latitude (Y): 37.225056 N Longitude (X): -122.331031 W The main camp entrance is located approximately 1.5 miles onto Canyon Road off of Cloverdale Road in Pescadero, California. See project maps (Attachment B, Map 1, 2, and 3) or see *Figure 7, 8,* and *9* respectively.
7.	**Total Area to be Treated (acres)**	Approximately 44 acres

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

Problem Statement:

Forested landscapes across the Santa Cruz Mountains are undergoing significant change. The climate is becoming warmer and drier, endemic species are at risk, and sudden oak death has taken an immeasurable toll on regional ecosystems and overall forest health. At the same time, drier site conifer species are displacing hardwoods and other sensitive plant species, reducing biodiversity and affecting the suitability of these habitats for rare and special-status wildlife. Altered fire regimes and increased fuel loads are driving larger and more catastrophic wildfires. The result has generated damaging changes to ecosystems that require environmentally sensitive landscape-level treatments to redirect the path of changing climates and ecological conditions impacting the Santa Cruz Mountains and surrounding communities. Most notably for San Mateo and Santa Cruz County in 2020, the CZU Lightning Complex fire burned 86,509 acres, destroyed 1490 buildings, and exhibited extreme fire behavior. Initial

estimates suggest that over 50% of the impacted area burned at high fire severities. Many forested stands that were topographically exposed to the extreme fire weather resulted in significant tree mortality and habitat losses, considered an impaired forest condition, that will take decades to recover.

The Girls Scouts of Northern California Camp Butano Creek redwood forest still holds ecologically resilient characteristics from the past with scattered old growth trees and remnants of a time when the understory was more diverse. The lack of fire, until recently, and a reduced large scale stewardship effort of this property in the last 30 years, coupled with changing climates has left the majority of the property severely over stocked in the understory and mid-range tree diameters.

Goal Statement:
The goal of implementing this project is to ecologically restore forest conditions to exhibit an increase in healthy growth of larger trees and allow sunlight to reach the forest floor to increase plant diversity, while also reducing ladder fuels and the associated fire hazard, and to ultimately maintain and improve the redwood forest alliance composition per the Second Manual of Vegetation. The conditions described in the Second Manual of Vegetation for the redwood alliance, or *Sequoia sempervirens,* is that redwoods make up >50% relative cover in the tree canopy, or >30% relative cover with other conifers, such as Douglas-fir, or with a lower tier of hardwood trees, such as tanoak (please see the *Project Summary* for further details).

The forest growth that had been attributed to approximately 300 – 400 stems per acre, creating weaker forest stand conditions more susceptible to disease and high severity fires, will be adjusted ~~attributed~~ to approximately 200 stems per acre of mid-range and larger diameters trees following treatments. Treatment of the dead, partially consumed understory material left after the CZU fire and removal of small diameter trees up to approximately 8 inches in diameter, and additional retreatments in the years to come can reduce the severity of future wildfire events and maintain the vegetation "membership rules"[1], as described above, for redwood forest in this area. Remaining trees will extend their heights and expand their crowns becoming more vigorous to resist vegetation pattern transformations in the face of a climate change and increase the separation of ladder fuels from tree crowns ultimately reducing the severity of wildfire.

Additionally, this project supports the intent of the Forest Health Program goals, California's climate goals, and the goals of the California Coastal Commission for Environmentally Sensitive Habitat Areas (ESHA) where ecological restoration treatment types may occur to:

- Proactively restore forest health, improve ecosystem resiliency, and conserve working forests, or actively managed forests that promote sustainability and various ecosystem services, by conducting ecologically minded forest health treatments.
- Protect state water supply sources by strategically implementing ecological restoration projects across priority watersheds.
- Encourage the long-term storage of carbon in forest trees and soils through the reduction of dense understory thus promoting larger healthier stands of mature trees.
- Minimize the loss of forest carbon from large, intense wildfires, through reduction of ladder fuels and brush resulting from years of fire suppression.

[1] Requirements to maintain membership rules at an alliance level under the 2nd edition of the Manual of California Vegetation for redwoods

- Promote public safety, health, and welfare and protect public and private property through the implementation of ecologically restorative fuel reduction treatments in the Wildland-urban Interface (WUI).

Project Description:
Mechanical mastication would be utilized to treat understory vegetation, dead or downed material, hazard trees, dead, dying, and diseased trees, and live trees up to 8 inches diameter at breast height (DBH). Understory vegetation, brush, and shrubs under the drip lines of trees shall be cut and masticated leaving root systems intact for resprouting. All debris and materials left by the masticator will be lopped and scattered throughout the treatment area. The manual treatment crew may utilize chainsaws and/or other various hand mechanized or hand tools to prune trees and woody vegetation, buck, meaning to cut into smaller sizes and lengths, downed debris and materials, and to treat dead, dying, and diseased trees of any diameter, and live trees up to 8 inches DBH.

Project Site:
Camp Butano Creek is a private recreational property containing hiking trails, camp facilities, such as cabins, dining halls, and amphitheaters, utilized by campers affiliated with the Girl Scouts during summer camp sessions. Proposed mechanical treatment areas are located within the property boundary along ridges and on slopes less than approximately 40%. Any operations in proximity to the Camp Activity Line during camp sessions may require trail closures and noticing for camper and staff safety.

Project Location:
The project treatment area encompasses a total of approximately 44 acres within the Girl Scouts of Northern California Camp Butano Creek property, which is approximately 143.6 acres total. The property is located south of Pescadero, east of Highway 1, and northeast of Bean Hollow Lakes in San Mateo County, see *Figure 8*.

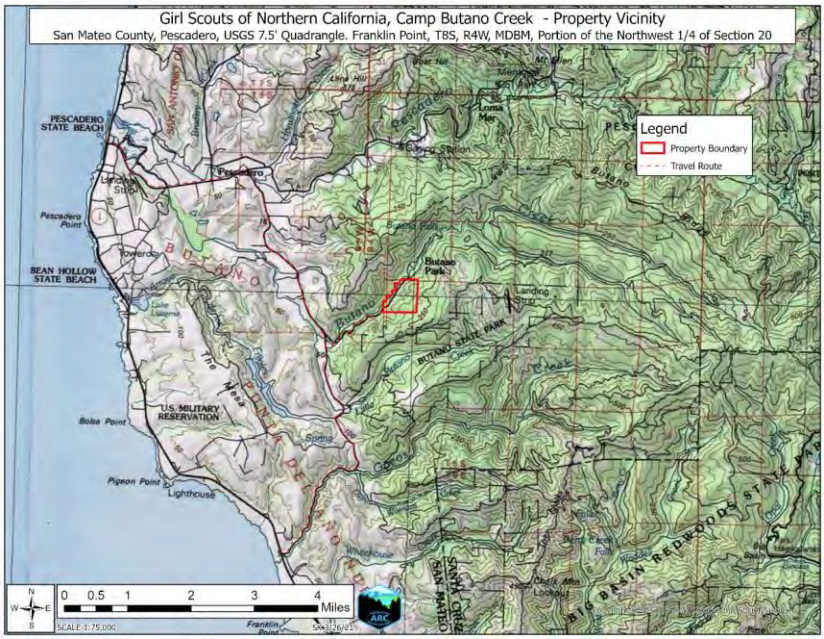


Figure 8: Camp Butano Creek Project Property Vicinity Map (map not to scale, see full scale map in Attachment B, Map 2).

Initial Treatment Description:

Treatment Types

Ecological Restoration

This project proposes ecological restoration treatment types to restore ecosystem processes, conditions, and resiliency through the treatment of dense understory fuels and invasive species in areas generally outside of the WUI, or areas integrated into WUI fuel reductions, as defined in the PEIR (CalVTP Final PEIR Volume II Section 2.5.1 page 7 and page15-17). Implementing the treatment activities will result in a modification of the existing fuels that will ultimately support native vegetative species regeneration and restore habitat conditions including, but not limited to habitat quality and natural fire processes. This property experienced low severity burns throughout much of the proposed treatment areas during the 2020 CZU Lightning Complex Fires. Following the fire, much of the understory vegetation was not fully consumed and has added to the dry vegetative fuel load. Thinning the stand through the treatment of small diameter live trees and understory vegetation will result increase the site's carrying capacity for stand volume, which would increase the growth of the residual trees (Skovsgaard, 2008). The build-up of fuels and vegetation creates competition for the available water, nutrients, and sunlight plants need to grow, therefore, the reduction of vegetative competition in the understory would increase the growth and carbon storage capacity in the residual stand.

Wildland-urban Interface Fuels Reduction

The proposed project areas are natural areas that are adjacent to homes, structures, and camp facilities, and are within proximity to a community of homes located along Redwood Avenue just north of the property boundary, called the Butano Subdivision, indicating that the project areas make up a WUI as defined in the PEIR (CalVTP Final PEIR Volume II Section 2.5.1

page 7 and page 8-10). Fuel reductions in the WUI will directly impact communities and assets at risk, serving as emergency access points along or near evacuation routes for the nearby communities and as an opportunity to slow or stop wildfires. WUI treatments would remove understory vegetation including dead, dying, hazard, and diseased trees of any diameter, ladder fuels, and live trees up to 8 inches DBH to promote a healthier residual stand following treatments. Habitat quality will be enhanced through WUI fuel reductions where existing habitat has been degraded due to invasive species encroachment or the accumulation of fuels.

Treatment Activities

Treatment activities consist of approximately 38.9 acres of mechanical treatments that will occur predominately on slopes below 40% along ridges and may occur reaching off existing road infrastructure on slopes greater than 40%. Masticators will be used to remove dense stands of understory vegetation and ladder fuels and maintain a healthy overstory, which is within the scope of the PEIR. As stated in the CalVTP PEIR Section 2.5.2, mechanical treatments may cut, uproot, crush/compact, or chop existing vegetation through the use of masticators and other methods of application. Understory vegetation, brush, and shrubs under the drip lines of trees shall be cut and masticated leaving root systems intact for resprouting. Understory debris would be chipped and scattered on-site within the treated areas, following the best management practices for reducing the spread of pests, disease, and invasive species (see *Pests and Disease* and *Invasive Species* sections below). The manual and mechanical treatment crews may utilize a chainsaw and/or various other mechanized tools or hand tools to cut, clear, or prune herbaceous or woody species and ladder fuels. Manual treatments will occur over approximately 5.4 acres predominately near sensitive resources and important camp infrastructure, such as the North Commons, Penny Royal, Sequoia, amphitheater, water treatment facility, and water tanks. Some manual treatment areas will occur on steep sleeps between approximately 40-50% where the forest will benefit from treatments, see *Figure 9*.

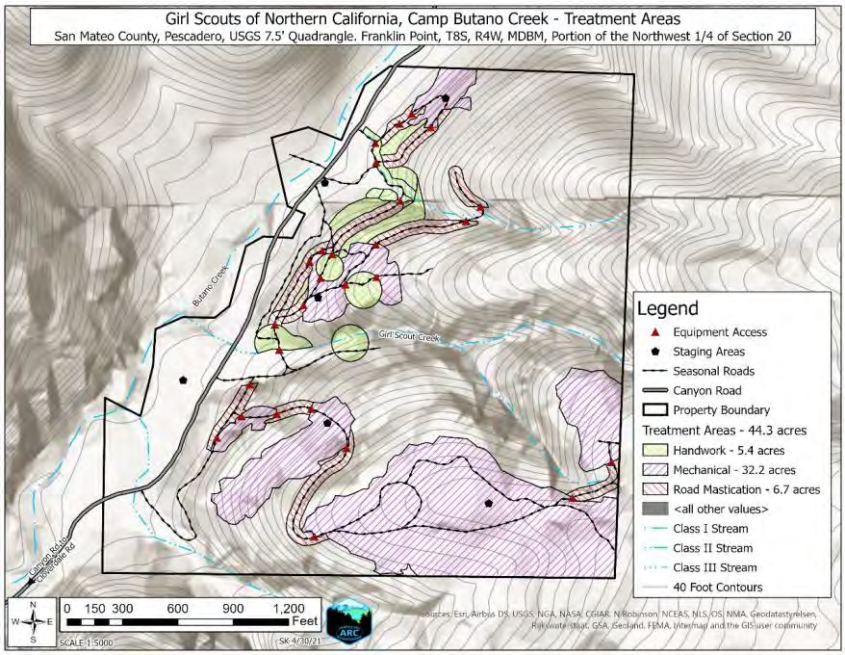


Figure 9: Camp Butano Creek Project Treatment Area Map (map not to scale, see full scale map in Attachment B, Map 3).

Fuel Types

Proposed treatments would occur predominately in tree fuel types with a shrub fuel type component in the understory as described in the CalVTP PEIR Section 2.4.1. The tree fuel types are dominated by second growth coastal redwood forests mixed with Douglas-fir and mixed hardwood stands. These forests have generally closed canopies with moderate to dense understory fuels. Understories located in areas that experienced the low severity burn during the 2020 CZU Lightning Complex Fires contain moderate fuel loads including dead and/or cured vegetation and a component of regenerative vegetation and tree sprouting. The removal of understory vegetation and ladder fuels in the tree fuel types would reduce the risk of future ground or surface fires spreading into the canopy. There is a small component of the shrub fuel type located in the understory that consists predominately of native shrub species, such as huckleberry, poison oak, and manzanita. However, invasive species, such as French broom, have been documented in treatment areas. The reduction of fuels within all fuel types can prevent stand replacement that may occur in the event of a wildfire that spreads continuously through the flammable foliage and woody materials.

<u>Maintenance Treatment Description:</u>

Maintenance treatments are estimated to occur approximately every 5-10 years, but may occur as needed over the lifetime of the CalVTP in compliance to Item #16 of this PSA. Following initial treatment, site conditions are expected to resemble a park-like setting with a clear, open understory that would promote a healthier, more vigorous forest. Open understories will create a mosaic of fuel continuity that would support wildlife habitats and the regeneration of native species. Maintenance intervals will be dependent on the re-establishment rate of the understory species and would be triggered by dense, continuous

understory and ladder fuels. Maintenance treatments would be conducted through the implementation of mechanical and manual treatments to treat hazard trees, understory vegetation and ladder fuels, and reduce the re-establishment of invasive species.

Equipment:
This project proposes the use of the following equipment:
Masticator (see specifications in the *Project Summary*)
Chipper
Chainsaws and/ or other mechanized tools or hand tools
Haul vehicles for equipment transport
Vehicles for contractor transport

Duration of Treatments:
Initial treatments are estimated to occur within the treatment areas over approximately 42 days within a 2-year period, however, the timeframe may change in the event of delays, such as weather or production rates.

Pests and Disease:
The pathogen, *Phytophthora ramorum,* commonly referred to as Sudden Oak Death (SOD), infects coastal forests throughout California and Oregon and kills susceptible species including tanoak, coast live oak, California black oak, Shreve's oak, canyon live oak, and madrone saplings. Host species that are in the project area include but are not limited to California bay laurel, coast redwood, and Douglas-fir. Along with the mitigation measures under project activities and treatment prescription, to avoid the spread of this pathogen, all hand equipment, including boots, will be sanitized and heavy equipment hosed off prior to operations in areas where the spread of SOD is possible. The California Oak Mortality Task Force website contains additional information regarding treatment and disposal measures for plants infected with SOD. See the attached link for additional information and to monitor changes in SOD treatment recommendations: http://www.suddenoakdeath.org/

Invasive Species:
French broom
French broom is a problematic invasive species due to its ignitability, ability to carry fire into tree canopies, shading out seedlings, and replacing the native plants and forage species. This species has a large seed bank and re-sprouts readily from the root after cutting, freezing, and fire (California Invasive Plant Council, Cal IPC, 2020). Cal IPC recommends pulling French broom to remove the entire plant including its roots to eliminate re-sprouting. The removal of this species is a priority due to its increased fire hazard and adverse impacts to habitat and aesthetics. Additional information about French broom control and treatments are located on the Cal IPC website. See the attached link for additional information and to monitor changes in French broom treatment recommendations: https://www.cal-ipc.org/plants/profile/genista-monspessulana-profile/ and
https://wric.ucdavis.edu/information/natural%20areas/wr_G/Genista.pdf

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

   ☒ Wildland-Urban Interface Fuel Reduction
   ☐ Fuel Break
   ☒ Ecological Restoration

10. **Treatment Activities** [*see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in Description of Project*]

   ☐ Prescribed (Broadcast) Burning, _____ acres
   ☐ Prescribed (Pile) Burning, _____ acres
   ☒ Mechanical Treatment, 38.9 acres
   ☒ Manual Treatment, 5.4 acres
   ☐ Prescribed Herbivory, _____ acres
   ☐ Herbicide Application, _____ acres

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

   ☐ Grass Fuel Type
   ☐ Shrub Fuel Type
   ☒ Tree Fuel Type

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

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

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

   Physical

   The Camp Butano Creek property is located in Pescadero, San Mateo County bound by Butano State Park forests to the southeast and in proximity to a community of rural homes to the northwest, creating the wildland-urban interface (WUI). The project property ranges from approximately 200 feet to 680 feet elevation within the Butano Watershed. The property contains a central Class II watercourse called Girl Scout Creek and several Class III watercourses are located throughout the property. The northwest property boundary is bordered by and overlaps with Butano Creek, a Class I watercourse. Surrounding land uses include recreational land to the south, east, and northeast and several rural communities or

private properties located to the north and west. See attached maps (Attachment B, Map 1, 2, and 3) or *Figure 7, 8,* and *9* respectively.

Vegetation

The vegetation within the Camp Butano Creek property is comprised of forests dominated by predominately second growth coastal redwood, Douglas-fir, and mixed hardwood forests. The understory is comprised of native brush and shrub species, such as huckleberry, poison oak, and manzanita. French broom is a common invasive species located within the project area.

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

No other public agency approval is required for this project.

The California Department of Fish and Wildlife (CDFW) was consulted during the planning phase of this project.

The proposed project is within the Coastal Zone, as defined by the California Coastal Act, and pursuant to SPR AD-9 in the PEIR (CalVTP Final PEIR Volume II Section 2.7.1, 34). Communication and coordination between the California Coastal Commission (CCC), San Mateo Resource Conservation District, and similar entities has allowed for the development of a Public Works Program (PWP) in lieu of a coastal development permit through the creation of a set of Coastal Vegetative Treatment Standards (CVTS) (Attachment G). The CCC received a DRAFT Camp Butano Creek PSA for their review on April 23, 2021.

The San Francisco Bay Regional Water Quality Control Board was contacted during the planning phase of this project on April 23, 2021 by the San Mateo Resource Conservation District.

The County of San Mateo was consulted during the planning phase of this project for project reviewal and during the development of the Public Works Plan (PWP) for projects located in the Coastal Zone.

The project property is under a conservation easement with Sempervirens Fund. Sempervirens Fund was consulted during the planning the phase of this project and proposed treatments are designed to operate within the conservation easement.

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

CAL FIRE Associate State Archaeologist, Ben Harris, was consulted during the planning phase of the proposed project on May 4, 2021. A records check through the Northwest Information Center (NWIC) was completed on February 10, 2021. Due to the confidentiality of the records check, results may be available to qualified personnel upon request, see the archaeological, historical, and tribal cultural resources discussion below. In addition, a letter was written to the geographically affiliated tribes on May 4, 2021 and a full Archaeological Survey Report (ASR) will be completed and submitted to CAL FIRE and the NWIC upon submittal of the CalVTP PSA.

16. **Use of PSA for Treatment Maintenance:**

[Prior to implementing a maintenance treatment, the project proponent would verify that the expected site conditions as described in the PSA are present in the treatment area. As time passes, the continued relevance of the PSA would be considered by the project proponent in light of potentially changed conditions or circumstances. Where the project proponent determines that the PSA is no longer sufficiently relevant, the project proponent would determine whether a new PSA or other environmental analysis is warranted. In addition to verifying that the PSA continues to provide relevant CEQA coverage for treatment maintenance, the project proponent would update the PSA at the time a maintenance treatment is needed when more than 10 years have passed since the approval of the PSA or the latest PSA update. For example, the project proponent may conduct a reconnaissance survey to verify that conditions are substantially similar to those anticipated in the PSA. Updated information should be documented.]

Prior to retreating any area within the project boundary, the project proponent will verify that site conditions described in the PSA are still relevant. CAL FIRE's contract with the landowner are for 10 years. After 10 years, the landowner can enter into a new agreement with CAL FIRE, and a new PSA will be developed. If a new contract is not initiated, it is at the discretion of the landowner to maintain the project area if desired.

17. **Standard Project Requirements and Mitigation Measures.** [*Refer to Attachment A to identify which SPRs and Mitigation Measures apply to the project. Complete Attachment A to document the responsible party for each applicable SPR and Mitigation Measure. Check one box below.*]

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

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

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

Explanation:

DETERMINATION (To be completed by the project proponent)

On the basis of this initial evaluation:

☐ I find that all of the effects of the proposed project (a) have been analyzed adequately in the CalVTP PEIR, (b) have been avoided or mitigated pursuant to the CalVTP PEIR, and (c) all applicable mitigation measures and Standard Project Requirements identified in the CalVTP PEIR will be implemented. The proposed project is therefore **WITHIN THE SCOPE** of the CalVTP PEIR. NO ADDITIONAL CEQA DOCUMENTATION is required.

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

☐ I find that the proposed project will have effects that were not examined in the CalVTP PEIR. Although these effects might be significant in the absence of additional mitigation beyond what is already required pursuant to the CalVTP PEIR, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent that would avoid or reduce the effects so that clearly no significant effects would occur. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project will have environmental effects that were not examined in the CalVTP PEIR. Because these effects are or may be significant and cannot be clearly mitigated, an ENVIRONMENTAL IMPACT REPORT will be prepared.

Signature: _____ Date: _____

Printed Name: _____ Title: _____

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CAL FIRE
Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the life span of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:
   (Definitions located in Chapter 3 – "Environmental Settings, Impacts, and Mitigation Measures, 3.1.4 – Terminology Used In the PEIR")
   - **Less Than Significant (LTS)** - An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
   - **Less Than Significant *with* Mitigation (LTSM)** - An impact was identified within the PEIR which was viewed in totality as potentially significant and/or significantly unavoidable and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.
   - **Potential Significant (PS)** - An impact treated as if it were a significant impact. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
   - **Potentially Significant and unavoidable (PSU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR
   - **Significantly Unavoidable (SU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
   - **Not applicable (N/A)**

   If the impact is equal to or less than the impact identified in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.
4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.

5. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.

6. Standard Project Requirements (SPR) and Mitigations Measures (MM).
    - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
    - **Implementing Entity**. Most cases this will be CAL FIRE. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
    - **Verifying/Monitoring Entity**. Most cases this will be CAL FIRE. The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.
    - **NOTE**: the cited SPRs and MMs are summarized to manage the templet's size. Refer to the approved CalVTP language attached for the full list of requirements.

EC-1: AESTHETICS AND VISUAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
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	Impact AES-1, 3.2	LTS	SPR AES- 2 SPR AQ- 2, 3 SPR REC-1	YesYes	LTSLTS	☒
This project proposes mechanical and manual treatments that will occur predominately in the understory. The potential for these treatments to result in a 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 those addressed in the PEIR. The project area is located on a property used seasonally for recreational purposes by the Girl Scouts of Northern California and contains several hiking trails utilized by campers and staff. The property is located outside of the viewshed of any state highways or public viewpoints. The project area is located along a residential road, called Canyon Road, where manual treatment areas may be visible by local commuters. The project property experienced a low severity burn during the 2020 CZU Lightning Complex Fires that left an understory exhibiting a buildup of burnt, dead fuels with a component of regenerative vegetation and sprouts. The implementation of the applicable SPR's, including SPR AES-2, AQ-2, AQ-3, and REC-1, will minimize the impacts to visual resources within the treatment areas. This project will promote a healthy residual stand and will resemble open, park-like conditions following treatments. Therefore, the potential for this project to result in short-term degradation of a scenic vista, visual character, or damage to scenic resources would be less than significant.							
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	Impact AES-2, 3.2	LTS	SPR AES- 1 SPR AES- 3 SPR AD- 4 SPR REC- 1	YesYes	LTSLTS	☒
Initial and maintenance treatments would include WUI fuel reduction and ecological restoration 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 property is seasonally used for recreational activities by campers and staff and is not visible from any public scenic viewpoints or state highways. The implementation of the applicable SPR's, including SPR AES-1, AES-3, AD-4, and REC-1, will minimize the impacts						

to visual resources within the treatment areas. As analyzed in Impact AES-1, any impacts to aesthetics will be temporary and short-term because understory plants will regenerate and sprout shortly after the treatments are implemented and will resemble park-like conditions. In addition, treatments will remove the dead and burnt understory fuels that are a product of the 2020 CZU Lightning Complex Fires and promote a healthy residual stand. 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: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	Impact AES-3, 3.2	SU	MM AES- 3	NoNo	N/AN/A	☒
This impact does not apply to this project because it does not propose non-shaded fuel break treatment types. The treatment areas are located within the tree fuel type that contains a component of the shrub fuel type in the understory, however, the treatment areas do not contain a natural change from a forested to non-forested vegetation type. Therefore, no impact will occur as a result of implementing a non-shaded fuel break treatment.						
Other Impacts to Aesthetics: Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent 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.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AES-1 Vegetation Thinning and Edge Feathering: This SPR only applies to mechanical and manual treatment activities within all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
Contractors implementing manual and mechanical treatments will keep operations within designated treatment boundaries and will perform operations with the intent of exhibiting feathered vegetation densities in treatment areas to mimic natural transitions to changes in vegetation densities. Treatments will result in vegetation resembling open, park-like understories.			
SPR AES-2 Avoid Staging within Viewsheds: This SPR applies to all treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE

The proposed treatment areas are located within a private property with hiking trails accessible to campers and staff. The property is located along Canyon Road, a public residential road, where equipment may be visible from. Contractors implementing treatments will avoid staging equipment in locations visible to the public utilizing Canyon Road and in areas that are in proximity to frequent camper and staff visitation where feasible.			
SPR AES-3 Provide Vegetation Screening: This SPR applies to all treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
This project is located on a private property and proposed treatment areas are outside of the viewshed from public parks and state highways. The property contains hiking trails accessible to campers and staff. Contractors will screen vegetation in treatment areas that may be visible from hiking trails and roadways.			
MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks	NoNo	N/AN/A	
This project does not propose non-shaded fuel break treatment types.			

EC-2: AGRICULTURE AND FOREST RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AG-1: Result Directly in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	Impact AG-1, 3.3	LTS	N/A	YesYes	LTSLTS	☒
The initial and maintenance treatments include mechanical treatments with a component of manual treatments around camp infrastructure and sensitive resources. The treatment areas are comprised of forests dominated by redwoods, Douglas-fir, and mixed hardwood species. There is no farmland within the project area. The potential for the proposed treatments to result in the loss of forest land was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.3.3, page 7-8). Potential impacts resulting in the conversion of forest land are within the scope of the PEIR because the treatment activities are consistent with those addressed in the PEIR. As stated in the PEIR, "treatment activities under the CalVTP would not result in the loss of forest land or conversion of forest land to non-forest use," (CalVTP Final PEIR Volume II Section 3.3.3, page 7). The project treatment does not remove trees for commercial purposes and does not remove live trees established in the overstory canopy due to the 8-inch diameter at breast height (DBH) limitation in the treatment prescription, retaining the dominant vegetation types and avoiding conversion of forest land to non-forest land. Hazard trees, or trees of any size that are considered a direct threat to personal safety or infrastructure, may be removed, which would not convert forest land to non-forest land. Although this project proposes the removal of understory vegetation and ladder						

fuels, treatments would improve the health and vigor of the forest and develop a shaded fuel break more resilient to changing climates in the future. Based on the treatment activities and beneficial results of the proposed project, no forestland, timberland, or farmland will be converted, any impact would be less than significant.

Other Impacts to Agriculture and Forest Resources: Would the project result in other impacts to agriculture and forest resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed project treatment is consistent with the treatments and activities that are considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed project and determined that they are consistent with the environmental and regulatory settings stated in the CalVTP PEIR (CalVTP Final PEIR Volume II 3.3.1 and 3.3.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to agriculture and forestry resources would occur that is not covered in the PEIR.

EC-3: AIR QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	Impact AQ-1, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6 MM AQ- 1	YesYes	PSUPSU	☒

Initial and maintenance treatments would require the use of vehicles, mechanical equipment, and mechanized hand tools, which would result in criteria pollutants that could exceed California ambient air quality standards (CAAQS) or the national ambient air quality standards (NAAQS) thresholds. The potential for emissions of criteria to exceed CAAQS or NAAQS thresholds was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 26-33). The proposed treatments, treatment equipment, and equipment use duration are consistent with the scope of the PEIR. The proposed treatment types, mechanical and manual treatments, produce much less emissions of criteria air pollutants and precursors per acre than the prescribed burning treatment type (CalVTP Final PEIR Volume II Section 3.4.3 Table 3.4-6). SPR's AD-4, AQ-2, and AQ-6 are not applicable to this project because the project does not involve prescribed burning. Mitigation Measure AQ-1 is applicable to this project and would reduce the mass emissions of criteria air pollutants by implementing vehicle and equipment exhaust emission reduction techniques.

Ultimately, the implementation of this project will reduce long-term impacts to air quality by reducing the amount of vegetative fuels available to burn in the case of a wildfire, indicating air quality impacts would be less than significant. Therefore, any substantial increase in the severity of this significant impact associated with changed circumstances would not occur. Following the implementation of applicable the Mitigation Measure, this project's potential to generate emissions of criteria air pollutants and precursors during treatment activities that would exceed CAAQS or NAAQS and conflict with Regional Air Quality Plans would remain potentially significant and unavoidable, because, as stated in the PEIR, the amount of emission reduction as a result of implementing MM AQ-1 cannot be determined due to various variables assessed in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 33).						
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4 SPR NOI- 5	YesYes	LTSLTS	☒
The use of vehicles, mechanical equipment, and mechanized hand tools equipment during initial and maintenance treatments could expose people to diesel particulate matter emissions. The potential to expose people to diesel particulate matter was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 33-34). The proposed treatments will occur over a short duration and would not occur next to the same people for an extended period of time. Additionally, the implementation of the applicable SPR's, including SPR HAZ-1, NOI-4, and NOI-5, will minimize human receptor exposure to diesel particulate matter emissions. Diesel particulate matter emissions from the proposed project and its impacts are within the scope of the PEIR and treatment activities are consistent with those addressed in the PEIR. Based on the implementation of the SPR's and the short duration of treatment activities, any impact related to the exposure of people to diesel particulate matter emissions and related health risks would remain less than significant.						
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	LTS	SPR AQ- 4, 5	YesYes	LTSLTS	☒
This project proposes treatment activities that would involve ground disturbing activities. The potential to expose people to fugitive dust emissions containing naturally occurring asbestos was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 34-35). The implementation of the applicable SPR's, including SPR AQ-4 and AQ-5, will minimize dust emissions as a result of treatment activities. No naturally occurring asbestos appears to be located in the treatment areas per maps created by the California Geologic Survey (ArcGIS Online, 2020). Based on the implementation of the applicable SPR's and the absence of naturally occurring asbestos within the project area, any impact in relation to fugitive dust emissions containing naturally occurring asbestos would be less than significant.						
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	Impact AQ-4, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6	NoNo	N/AN/A	☒

This impact does not apply to this project because the proposed project does not include prescribed burning. Burning treatments will not be considered for the initial or maintenance treatments. Therefore, there will be no impact related to toxic air contaminants released by smoke.						
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	Impact AQ-5, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4, 5	YesYes	LTSLTS	☒
The use of vehicles and mechanical equipment during initial and maintenance treatments may expose human receptors to the objectional odors from diesel exhaust. The potential to expose human receptors to diesel exhaust was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 37-38). The release of objectional odors from diesel exhaust during proposed treatments is within the scope of the impacts stated in the PEIR because the treatment activities are consistent with those analyzed in the PEIR. Hiking trails located within or adjacent to treatment areas will be temporarily closed to access by campers and staff, which would minimize the amount of diesel exhaust exposure to human receptors. The implementation of the applicable SPR's, including SPR HAZ-1, NOI-4, and NOI-5, will minimize the amount of diesel odors exposed to human receptors during treatment activities. Based on the implementation of applicable SPR's and potential for trail closures, any impact in relation to the exposure of people to objectional odors from diesel exhaust would remain less than significant.						
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	Impact AQ-6, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6	NoNo	N/AN/A	☒
This impact does not apply to this project because prescribed burns are not included in the proposed treatments. Burning treatments will not be considered for the initial or maintenance treatments. Therefore, no impact related to exposure to odors released from smoke will occur.						
Other Impacts to Air Quality: Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities evaluated in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined that they are consistent with the regulatory and environmental settings as stated in the PEIR (CalVTP Final PEIR Volume II 3.4.1 and 3.4.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to air quality would occur that is not analyzed in the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AQ-1 Comply with Air Quality Regulations: This SPR applies to all treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The Bay Area Air Quality District guidelines for dust abatement and other air quality concerns was reviewed for this project in compliance to SPR AQ-1.			
SPR AQ-2 Submit Smoke Management Plan: This SPR applies only to prescribed burning treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose prescribed burning treatment activities.			
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. This SPR applies only to prescribed burning treatment activities and all treatment types**.**	NoNo	N/AN/A	
This project does not propose prescribed burning treatment activities.			
SPR AQ-4 Minimize Dust: This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The listed measures within SPR AQ-4 will be implemented and practiced during operations.			
SPR AQ-5 Avoid Naturally Occurring Asbestos: This SPR applies to all treatment activities and treatment types.	NoNo	N/AN/A	
Pre-operational research indicates that no naturally occurring asbestos appears to be located in the treatment areas per maps created by the California Geologic Survey (ArcGIS Online, 2020). If naturally occurring asbestos is identified within the project area during treatment activities, then the area shall be avoided. Due to the absence of naturally occurring asbestos, this SPR does not apply to this project.			
SPR AQ-6: Prescribed Burn Safety Procedures: Prescribed burns will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP).	NoNo	N/AN/A	
This project does not propose prescribed burning treatment activities.			
MM 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.	YesYes	SMRCD DuringDuring	CAL FIRE
The implementing entity has determined the following components of Mitigation Measure AQ-1 to be feasible for reducing emissions: encouraging contractors to carpool, substituting gasoline-powered equipment or renewable diesel fuel equipment where feasible, and utilizing equipment with Best Available Control Technology. Equipment that meets the EPA's Tier 4 emission standards will be utilized if available.			

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, 3.5	LTS	SPR CUL-1, 7, 8	YesYes	LTSLTS	☒
Initial and maintenance treatments would include the use of heavy mechanical equipment and manual treatments. The potential for these treatments to cause a substantial adverse change in significance to built historical resources was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 14-15). The potential to change the significance of built historical resources during project operations is within the scope of the PEIR because the treatment activities and level of disturbance are consistent with those addressed in the PEIR. Applicable SPR's will be implemented. If a built historic resource is discovered prior to or during operations, operations in proximity to the resource will cease and the area will be flagged and avoided. Based on the implementation of the applicable SPR's and archaeological protocols for this project, it is likely that any impact that may cause a substantial adverse change in the significance of a built historical resource would be less than significant.						
Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	Impact CUL-2, 3.5	SU	SPR CUL-2, 3, 4, 5, 8 MM CUL- 2	YesYes	SUSU	☒
Initial and maintenance treatments would include the use of heavy mechanical equipment that would result in ground disturbance. The potential for these treatment activities to result in inadvertent discovery of unique archaeological resources or subsurface historical resources was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 15-16). The potential for there to be an inadvertent discovery of unique archaeological resources or subsurface historical resources is within the scope of the activities and impacts discussed in the PEIR because the treatment activities and the extent of ground disturbance of the project treatments are consistent with those analyzed in the PEIR. SPR CUL-1 through CUL-5 and CUL-8 will be implemented to minimize the risk of inadvertently damaging or discovering unknown resources during treatment activities. Mitigation Measure CUL-2 will also be implemented to further minimize impacts on unknown unique archaeological or subsurface historical resources by ceasing all activities within 100-feet of the discovered resource(s) until a qualified archaeologist is contacted and determines the significance of the find. Although the implementation of the protocol and avoidance measures, SPR's, and Mitigation Measure will reduce the risks of this impact, unknown resources could be inadvertently damaged. Therefore, this impact would remain significant and unavoidable, as stated in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 16).						

Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, 3.5	LTS	SPR CUL-1, 2, 3, 5, 6, 8	YesYes	LTSLTS	☒
Initial and maintenance treatments would include the use of heavy mechanical and manual treatments, which would result in ground disturbing activities. The potential for treatment activities to cause a substantial adverse change in the significance of tribal cultural resources was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 16-17). The potential for adverse effects to tribal cultural resources during implementation of the project treatments is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and level of ground disturbance are consistent with those analyzed in the PEIR. The implementation of SPR CUL-1 through CUL-6 and CUL-8 would minimize the potential for impacting tribal cultural resources. An information request letter was sent out to the geographically affiliated tribes on May 4, 2021. Based on the implementation of the applicable SPR's and the results from consulting with geographically affiliated tribes, it is likely that this project's potential to create an adverse change in the significance of tribal cultural resources is less than significant.						
Impact CUL-4: Disturb Human Remains	Impact CUL-4, 3.5	LTS	N/A	YesYes	LTSLTS	☒
Initial and maintenance treatments would include mechanical treatments utilizing heavy equipment and manual treatments, which would result in ground disturbing activities. The potential for treatment activities to uncover human remains was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.5.3, page 17). The potential for human remains to be uncovered during the implementation of project treatments is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and level of ground disturbance are consistent with those analyzed in the PEIR. As stated in the PEIR, this project would comply with the California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097, which indicate that if human remains are discovered, there shall be no further disturbance or excavation of the site and the human remains shall be left undisturbed. There are no SPR's or Mitigation Measures for this impact. Based on this project's compliance with the California Health and Safety Code Sections 7050.5 and 7052 in addition to PRC Section 5097, any impact to discovered human remains is expected to be less than significant.						
Other Impacts to Archeological, Historical, and Tribal Cultural Resources: Would the project result in other impacts to archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities considered in the PEIR. The project proponent has considered the site-specific characteristics of the treatment project and determined they are consistent with the environmental and regulatory setting conditions discussed in the PEIR (CalVTP Final PEIR Volume II Section 3.5.1 and 3.5.2). No changed circumstances would lead 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 addressed in the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR CUL-1 Conduct Record Search: For treatments led by CAL FIRE, an archaeological and historical resource record search will be conducted per the "Archaeological Review Procedures for CAL FIRE Projects" (current edition dated 2010). This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
A records check was completed by the Northwest Information Center (NWIC) on February 10, 2021. Due to the confidentiality of the records check, results may be available to qualified personnel upon request.			
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, which may be obtained from the CAL FIRE website, as appropriate. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
An information request letter was sent out to the geographically affiliated tribes on May 4, 2021.			
SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
Pre-field research has been completed as part of completing a full Archaeological Survey Report (ASR) that will be submitted to CAL FIRE and the NWIC upon submittal of the CalVTP PSA.			
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
Archaeological surveys have been completed as part of completing a full ASR that will be submitted to CAL FIRE and the NWIC upon submittal of the CalVTP PSA. In addition, CAL FIRE Associate State Archaeologist, Ben Harris, was consulted during the planning phase of this project on May 4, 2021.			
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The implementation of this SPR will minimize impacts to archaeological cultural resources discovered during operations.			

SPR CUL-6 Treatment of Tribal Cultural Resources: If a tribal cultural resource is identified within a treatment area, and cannot be avoided, the project proponent in consultation the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The implementation of this SPR will minimize impacts to tribal cultural resources discovered during operations.			
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The records search did not identify any built historical resources within the project area. However, if a built historical resource is discovered during operations, operations will cease, and the resource will be avoided.			
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
The implementation of this SPR will reduce the risk of operations resulting in an impact to sensitive archaeological, historical, or tribal cultural resources.			
MM 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 professional archaeologist or CAL FIRE archeological trained Registered Professional Forester will assess the significance of the find.	YesYes	SMRCD DuringDuring	CAL FIRE
This project proposes mechanical and manual treatments that would result in ground disturbance. The implementation of this Mitigation Measure will minimize the impacts to subsurface resources that may be discovered during operations.			

EC-5: BIOLOGICAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	Impact BIO-1, 3.6	PS	SPR BIO-1, 2, 7, 9 SPR AQ-3, 4, SPR GEO-1, 3, 4, 5, 7 SPR HYD-5 MM BIO-1a, 1b, 1c	YesYes	PSPS	☒

Initial treatments and maintenance treatments include the use of mechanical and manual treatments, which could result in direct or indirect adverse effects to special-status plant species due to the project areas containing potentially suitable habitat for some species. The potential for adverse effects to special-status plants is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. Mechanical treatments and manual treatments may directly or indirectly impact special-status species; however, the removal of understory vegetation and invasive species will promote the regeneration of native species that supports a healthier residual forest. SPR's applicable to this project include SPR BIO-1, BIO-2, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, and GEO-7.

Special-Status Plants

According to the CNDDB BIOS search, there are two special-status plants, including Anderson's manzanita and Santa Cruz microseris, that have potentially suitable habitat located within treatment areas. However, there are no known special-status plant species occurrences within the treatment areas, therefore Mitigation Measures BIO-1a, BIO-1b, and BIO-1c do not apply. An analysis for the potential for impact on each special-status plant species that may occur within 5 miles of the project property boundaries and a biological resources survey report have been completed (Attachment D and Attachment E respectively). Reconnaissance level surveys will be conducted prior to operations to determine occupancy of special-status species that have potential to occur in the project area. Periodic reconnaissance level surveys will continue at this

property throughout the life of the PSA. If any California Endangered Species Act (CESA) or Federally Endangered Species (ESA) listed plant is encountered, operations shall cease in proximity, and the area shall be avoided. San Mateo County Resource Conservation District, or their supervised designee shall be notified immediately.

Based on the implementation of the applicable SPR's, including survey protocols and pre-operational meetings, and the proximity of special-status plant species to the treatment areas, it is likely that any impacts to special-status plant species could be potentially significant, as determined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 135).

Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, 3.6	PS / SU	SPR BIO-1, 2, 3, 4, 5, 8, 10, 11 SPR HYD-1, 3, 4, 5 SPR HAZ-5, 6 MM BIO-2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4	YesYes	LTSMLTSM	☒

Initial treatments and maintenance treatments include the use of mechanical treatment, which could result in direct or indirect adverse effects to special-status wildlife species or habitat due to the project areas containing potentially suitable habitat for some listed species. The potential for adverse effects to special-status wildlife species is within the scope of the activities and impacts addressed in the PEIR because the activities and level of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. Mechanical treatments will result in reduced understory vegetation that may modify preferred habitats for some species, however, it will promote a healthier, native residual forest habitat. SPR BIO-1, BIO-2, BIO-3, BIO-4, BIO-9, GEO-1, HYD-1, and HYD-4 will be implemented to minimize impacts, however, the Mitigation Measures listed below would need to be implemented to reduce impact significance.

Special-Status Wildlife

According to the CNDDB BIOS search, there are no special-status wildlife species that are known to occur within the project area and nineseven special-status wildlife species that have potentially suitable habitat within the project area (Santa Cruz black salamander, pallid bat, marbled murrelet, Townsend's big eared bat, California giant salamander, western pond turtle, San Francisco dusky-footed woodrat, mountain lion, and California red-legged frog). These species are categorized into the following life history groupings: Amphibians and Reptiles, Bats, Burrowing or

Denning Wildlife, and Tree-nesting and Cavity-nesting Wildlife. Mitigation Measures BIO-2a, BIO-2b, BIO-3a, BIO-3b, and BIO-3c will be applied based on the life history groupings to minimize residual impacts after the application of the SPR's. Mitigation measure BIO-4 does not apply because the treatment areas are not located in proximity to designated wetlands. An analysis for the potential for impact on each special-status wildlife species that may occur within 5 miles of the project property boundaries and a biological resources survey report have been completed (Attachment D and Attachment E respectively). Reconnaissance level surveys will be conducted prior to operations to determine occupancy of special-status species that have potential to occur in the project area. Periodic reconnaissance level surveys will continue at this property throughout the life of the PSA. If any California Endangered Species Act (CESA) or Federally Endangered Species (ESA) listed animal is encountered, operations shall cease in proximity, and the area shall be avoided. San Mateo County Resource Conservation District, or their supervised designee shall be notified immediately.

Marbled Murrelet

The marbled murrelet (*Brachyramphus marmoratur*) is listed as a state endangered and federally threatened seabird species. The California Natural Diversity Database (CNDDB) indicates that the marbled murrelet occurs within one mile of the property boundary within redwood stands near drainages, including upper Girl Scout Creek and Butano Creek, which is a flying corridor for this species. This species was not observed in the project area during preparation of this Project Specific Analysis (PSA). On April 20, 2021, CDFW composed a consultation letter describing habitat conditions before the 2020 CZU Lightning Complex Fires, which states: "Although large diameter residual conifers were present with a moderately closed canopy, none of the trees observed had large nesting platforms suitable for marbled murrelets. Based on the lack of trees with large suitable nesting platforms, CDFW determined that the fuel reduction treatment areas at Camp Butano Creek do not contain suitable marbled murrelet nesting habitat at this time." (Attachment F). Following the 2020 CZU Lightning Complex Fires, habitat conditions within the project property remain the same and suitable habitat throughout the Santa Cruz Mountains has been diminished as there are less trees with large platform branches and adequate screen trees. Additionally, the letter from CDFW outlined the following recommendations to be incorporated into the treatment project (Attachment F):

1. Following the first five years of forest fuel reduction activities, CDFW shall be contacted and consulted for re-evaluation of habitat suitability for the marbled murrelet.
2. Within the fuel reduction treatment areas, any non-hazardous trees that do not require removal and exhibit canopy deformities or large diameter limbs that provide relatively flat potential nesting platforms shall be retained as wildlife trees. Where feasible, screen trees and overlapping canopy trees shall be retained to provide protection from wind and predators.
3. Prior to fuel reduction treatment activities, the location of retained wildlife trees shall be conveyed to crew members to ensure that the identified wildlife habitat is not impacted during hazard tree removal activities. Nearby harvested trees shall be directionally felled away to avoid damage to these retained trees.
4. To avoid attracting predators of marbled murrelets, all garbage and food scraps shall be packed out and disposed of in animal-proof containers and transport offsite daily.

California Red-Legged Frog

The California red-legged frog (*Rana draytonii*) is listed as federally threatened and is a California Species of Special Concern. The CNDDB indicates that the nearest California red-legged frog occurs in Butano Creek, approximately 0.8 miles south of the property boundary, however, it does not show this species having potential to occur closer than approximately 0.73 miles from the southwestern property corner. Two mechanical treatment areas and several manual treatment areas are located along or in proximity to Canyon Road and fall within 300 feet of Butano Creek; the remaining treatment areas are not within 300 feet of Butano Creek and are focused on ridges, and flat areas near ridges. This species was not discovered in the project area during preparation of this PSA, no additional suitable breeding habitat was found in the proposed treatment areas, and dispersal through the treatment areas are unlikely.

Reconnaissance level surveys will be conducted prior to operations to determine occupancy of this species. Periodic reconnaissance level surveys will continue at this property throughout the life of the PSA.

This Project Specific Analysis occurs within the historic range of California red-legged-frog, so we assume presence unless protocol level surveys demonstrate absence. The following scenarios describe conditions for which take is not likely to occur when presence is known or assumed for timber harvesting plans; provided by "Information Needs and Guidelines for Timber Harvesting Plans (THPs) for US Fish and Wildlife Service Technical Assistance Analysis California Red-legged Frogs (CRF) (USFWS, March 2008). This Project Specific Analysis, although not a timber harvesting plan, utilizes the USFWS March 2008 guidelines scenarios to describe conditions for which take is not likely to occur when presence is known or assumed since some level of ground disturbing activities may occur through understory mastication:

I. Scenario I: No suitable habitat with harvest units and within 2 miles of harvest units
II. Scenario II: Suitable habitat within 2 miles of harvest units or in units, but no harvest activities within 300 feet of suitable habitat.
III. Scenario III: Suitable habitat within 2 miles of harvest units or in units and harvest activities planned within 300 feet of suitable habitat during the wet season. No take is estimated under the following conditions:
    i. For Class III watercourse, when dry, maintain a 30-foot buffer, trees felled away from watercourse.
    ii. For Class II watercourses and intermittent ponds/wetlands that meet the definition of suitable habitat, where water is present, 300 foot no cut buffer, where dry, 30-foot no cut buffer, no equipment within 75 feet of annual high water mark, trees felled away from suitable habitat.
    iii. Class I watercourse and permanent ponds/wetlands that mee the definition of suitable habitat – no cutting and no equipment with 300 feet of this suitable habitat.
IV. Scenario IV. Suitable habitat within 2 miles of harvest units or in units and harvest activities planned within 300 feet of suitable habitat during the dry season.
    i. All suitable habitat must maintain a 30-foot no-cut buffer; no equipment within the no-cut buffer; trees felled away from suitable habitat

Scenario III and IV described above shall be used during the wet and dry seasons respectively. As stated, the nearest suitable habitat is located adjacent to the western property boundaries within Butano Creek, however, the nearest occupied habitat is located approximately 0.8 miles south of the southwestern property corner.

Based on the survey protocols and pre-operational meetings, the proximity of special-status wildlife species to treatment areas, and the implementation of the SPR's and Mitigation Measures it is likely that this project will result in a less than significant impact on all wildlife species.

Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	Impact BIO-3, 3.6	PS	SPR BIO-1, 2, 3, 4, 5, 6, 8, 9 SPR HYD-4, 5 MM BIO-3a, 3b, 3c	YesYes	LTSLTS	☒

Initial and maintenance treatments include mechanical and manual treatments, which could result in direct or indirect adverse effects to sensitive habitats. The potential for treatment activities to result in adverse effects to sensitive habitats was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 187-192). The potential for adverse effects to sensitive habitats is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and level of disturbance as a result of the treatment activities are consistent with those analyzed in the PEIR. The SPR's that apply to this impact are SPR BIO-1, BIO-2, BIO-3, BIO-4, BIO-6, BIO-8, BIO-9, and HYD-4.

Table 3.6-3 in the PEIR (Volume II) for the Central California Coast ecoregion was reviewed and it was determined that the redwood, Douglas-fir, and montane hardwood California Wildlife Habitat Relationship (CWHR) classifications may be present within or in proximity to the treatment areas. Treatments are proposed within the redwood, a sensitive natural community, and Douglas-fir habitats. Due to the redwood forest community being considered a sensitive natural community under the PEIR, SPR BIO-3 will be implemented and requires site-specific surveys and mapping sensitive natural communities within these habitat types (Attachment B, Map 4, 5, and 6).

Sensitive Natural Communities – Redwood Forest

According to CAL FIRE FRAP vegetation data in combination with aerial photos and field verification points, there is approximately 112.7 acres of redwood forest present within the property boundary. The treatment areas contain a total of approximately 40.2 acres of redwood forest, or approximately 36% of the total redwood acreage present on the property (Attachment B, Maps 4 and 5).

Due to the treatment areas containing redwood forest, or the Redwood Forest and Woodland Alliance with a rarity rank of S3.2, as defined in the *Manual of California Vegetation,* Mitigation Measure BIO-3a would apply to the proposed project; however, this project falls under the exception of Mitigation Measure BIO-3a due to the determination of qualified registered professional foresters (RPFs) that this area would benefit from the

proposed treatments (Sawyer et al., 2009 and CNPS, 2019). The exception to the Mitigation Measure BIO-3a approach states that is acceptable only 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 and it shall be demonstrated in the PSA that the treatment will be beneficial with substantial evidence that habitat function is expected to improve, as outlined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, pages 151 and 152).

The proposed treatments will occur in the redwood forest type that is defined to have a variable fire return interval that depends on the site conditions and has an average of approximately 50 years in redwood forests similar to those within Big Basin Redwoods State Park (Sugihara et al., 2006, CNPS, 2019, and Jones & Russel, 2015). Notably, other redwood forests located in the Santa Cruz Mountains have been estimated to have shorter average fire return intervals as low as approximately 12 years, which may indicate an urgency for initial and maintenance treatments due to the potential for more frequent fires in coast redwood forests (Stephens & Fry, 2005). Although redwoods are a fire adapted species, ecological restoration treatments often include fuel reductions to develop a forest stand more resistant to catastrophic fires (O'Hara et al., 2017). Redwood forests can be at a disadvantage if they experience too much or too little fire frequency or intensity (Thornburgh et al., 2000). Studies have shown that thinning treatments in second growth redwood forests exhibit an increase in growth up to approximately four times than un-thinned or treated areas, developing old growth characteristics more rapidly (Thornburgh, et al., 2000). The development of old growth characteristics, such as stimulated branch growth and canopy complexity, as a result of thinning treatments may increase habitat quality and quantity for species that rely on old grow characteristics, including marbled murrelets (Keyes, 2011). In a case study regarding the redwood forest's response to low to moderate severity prescribed burns, it was suggested that follow-up mechanical thinning may be necessary to achieve restoration objectives, including reducing encroachment from Douglas-fir, due to mortality of younger cohorts in the understory (Engber et al., 2016). Similarly, studies utilizing local forest inventory and the Forest Vegetation Simulator in the Santa Cruz Mountains have suggested a carbon benefit to most ecologically restorative treatments that focus on an understory thinning up to 12 inches in diameter (Cal Poly SPR, 2021 and FVS, 2021).

The 2020 CZU Lightning Complex burned at such a low severity on Camp Butano Creek that it killed much of the understory but did not consume it (meaning turn to ash) and was followed by high wind events that blew down large trees and branches, now priming the area for a more extreme fire event. Similar conditions existed in redwood forests following the 2009 Lockheed Fire that occurred in Davenport, California, south of the project area. The Lockheed Fire burned with predominately low to moderate severities, with pockets of high severity and canopy fires (Lazzeri-Aerts and Russel, 2014). Following the Lockheed Fire, studies determined that coast redwoods exhibited the highest amount of regeneration by seed, basal sprout density, and regenerated canopy on surviving trees than other native species, indicating that redwoods are highly adaptive to fire and disturbance (Lazzeri-Aerts and Russel, 2014). Looking at the aerial photographs of the 2020 CZU Lighting Complex fire scar captured by NASA, the fire footprint of the 2009 Lockheed Fire appears white in coloration, indicating some of the highest severity burned areas (NASA, 2021). The buildup of fuels in the understory, including regenerated vegetation and downed 1,000-hour fuels from delayed tree mortality, following the Lockheed Fire likely contributed to the increase in fire severity during the 2020 CZU Lightning Complex Fires. Therefore, implementing initial and maintenance treatments over a 10-year period within the Camp Butano Creek property will be beneficial for the redwood forest community and improve habitat quality by maintaining fuel reductions in the understory, including reducing ladder fuels, to potentially minimize the severity of a future wildfire that occurs before the natural fire return interval.

The natural fire regime will not be immediately restored by this treatment, but characteristics of fire, predominantly regenerative action following vegetation treatments and ladder fuel alteration, will be conducted through mastication of understory vegetation, live trees up to 8 inches DBH, and dead, dying, and diseased trees to create a shaded fuel break that will promote the health and resiliency of the residual stand where approximately 80% of the native vegetation cover will be maintained. In treatment areas where multiple age classes are represented, the proposed treatment will promote heterogeneity, resiliency, and health in the residual stand by creating different influences of sunlight through the canopy to the forest floor adding to a mosaic of diversity in the understory.

Based on the research above and collective years of experience managing redwood forests, Steve Auten, RPF #2734, and David Van Lennep, RPF #2591, have determined that the redwood forests within the Camp Butano Creek property would benefit from ecological restoration and WUI fuel reduction treatment types implemented by this project.

Coastal Zone

Due to this project occurring within the coastal zone, SPR BIO-8 applies to this project and includes consultation with the California Coastal Commission (CCC). Efforts have been made between the CCC, San Mateo Resource Conservation District and other similar entities to develop a Public Works Plan (PWP) document that establishes a set of standards for CalVTP projects occurring within the coastal zone within San Mateo and Santa Cruz Counties that allows further treatments than presented in SPR BIO-8. The DRAFT Camp Butano Creek PSA was sent to the CCC on April 23, 2021 for review. A Coastal Vegetation Treatment Standards (CVTS) document has been filled out for this project and was submitted to the CCC on April 23, 2021 with the PSA (Attachment G). All of the Coastal Zone has been identified as ESHA in San Mateo County by the CCC. The basis of this project is to conduct ecologically restorative treatments that promote the persistence and resiliency of the redwood forest type as an environmentally sensitive habitat area through a myriad of protection, conservation, and avoidance measures.

The vegetation removal hierarchy, as outlined in the attached Coastal Vegetation Treatment Standards document, is as follows: (1) thinning and removal of dead, dying and diseased foliage, shrubs (except that some snags should be retained to provide wildlife shelter, dens, etc.); (2) removal of invasive species; and (3) removal of native species that are not listed as endangered, threatened, rare, or otherwise especially valuable, with the end goal of having appropriate species composition in the plant community with a mix of vegetation age, height and density (Attachment G). The treatment activities will reduce potential ignition sources, improve the forest's health and vigor, and promote a more resilient forest (see *Initial* and *Maintenance Treatment Descriptions*).

This project proposes all mechanical operations to occur outside of the Watercourse and Lake Protection Zone (WLPZ), however, riparian vegetation may be present outside of the WLPZ. The treatment prescriptions propose the treatment of most understory vegetation, dead, dying, and diseased trees, and live trees up to 8 inches.

Based on the treatment prescription, determination of qualified RPFs for treatments in redwood forests to occur, survey protocol and pre-operational meetings, and the implementation of the applicable SPR's and mitigation measures, it is likely that any impact to riparian habitat or other sensitive natural communities would be less than significant.

Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, 3.6	PS	SPR BIO-1 SPR HYD- 1, 3, 4, MM BIO- 4	NoNo	N/AN/A	☒
Impacts to designated wetlands does not apply to the proposed project because initial and maintenance treatments will not occur in designated wetlands. Therefore, no impact is expected to occur to state or federally protected wetlands as a result of this project.						
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	Impact BIO-5, 3.6	PS	SPR BIO- 1, 4, 5, 10, 11 SPR HYD- 1, 4 MM BIO- 5	YesYes	LTSMLTSM	☒
Initial and maintenance treatments include the use of mechanical and manual treatments that could result in direct or indirect adverse effects to wildlife movement corridors and nurseries because suitable habitat is present within the treatment areas. The potential for treatment activities to result in adverse effects to wildlife movement corridors and nurseries was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 193-197). The potential for adverse effects to wildlife movement corridors and nurseries is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and level of disturbance as a result of the treatment activities are consistent with those analyzed in the PEIR. The applicable SPR's for this proposed project impact include SPR BIO-1, BIO-4, HYD-1, and HYD-4. The proposed treatment areas may contain essential connectivity areas for some ungulate species and mountain lions as well as habitat for breeding sites or cover. This project proposes the use of mechanical treatment outside of the WLPZ and will comply with overstory cover requirements in riparian areas (SPR BIO-4). Mitigation measure BIO-5 will be implemented to retain and avoid nursery habitat through the establishment of buffers where necessary. Based on the implementation of SPR's and the mitigation measure, it is likely that any impact to wildlife movement corridors and nurseries would be less than significant.						
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	Impact BIO-6, 3.6	LTS	SPR BIO- 1, 2, 3, 4, 5, 12	YesYes	LTSLTS	☒
Initial and maintenance treatments include the use of mechanical and manual treatments, which could result in direct or indirect effects resulting in the reduction of habitat or abundance of common wildlife, including nesting birds, because suitable habitat is present in the treatment area. The potential for treatment activities to result in adverse effects to habitat and abundance of wildlife was addressed in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3, page 197-199). The potential for adverse effects to common wildlife, including nesting birds, is within the scope of the						

activities and impacts addressed in the PEIR because the treatment activities and level of disturbance are consistent with those analyzed in the PEIR. The implementation of SPR BIO-1, BIO-2, BIO-3, BIO-4, and BIO-12 will reduce the risk of this project resulting in adverse effects to habitat and the abundance of common wildlife.

The CNDDB review for listed species did not return any special-status birds within the project property boundaries, however, the property is in proximity to occurrences for marbled murrelets, please see the discussion on this species above in Impact BIO-2. Additionally, it is likely that common native birds may be present within or in proximity to the treatment areas. If it is infeasible for operations to occur outside of the active nesting season, between February 1st and August 31st, of common native birds, including raptors, that may be present in the vicinity of the project site, then a survey will be conducted within 7 days prior to operations (SPR BIO-12). Nesting bird surveys will be conducted in compliance to the following provisions:

- Nest tree(s), designated perch tree(s), screening tree(s), and replacement tree(s) shall be left standing and unharmed.
- Operations shall be planned and operated to commence as far as possible from occupied nest trees.
- When an occupied nest site of a listed bird species is discovered during operations, operations shall cease, and the nest tree shall be protected applying the provisions set forth in subsections (b) and (c) above and shall immediately notify CDFW and CAL FIRE.

The implementation of the nesting bird survey provisions and survey protocol indicate that any impact to nesting birds would be less than significant. Based on the survey protocol, nesting survey protocol, and the implementation of the applicable SPR's, it is likely that any impact to the loss of habitat or abundance of wildlife, including nesting birds, would be less than significant.

Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, 3.6	No Impact	SPR AD- 3	YesYes	N/AN/A	☒

The potential for treatment activities to result in conflict with local policies or ordinances was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.6.3 page 199). The potential for the proposed project to conflict with local policies or ordinances is within the scope of the activities and impacts addressed in the PEIR because the treatment projects implemented under the CalVTP are required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures (SPR AD-3) and are consistent with those analyzed in the PEIR. The County of San Mateo has been engaged in the development of the PWP for CalVTP projects occurring in the Coastal Zone of San Mateo and Santa Cruz Counties. The County of San Mateo was contacted during the planning phase of this project on May 4, 2021 to review this PSA and ensure compliance with applicable local ordinances and policies. Due to the project design, treatment prescription, including the 8-inch DBH limitation for live tree removal, and the parcel zoning, the proposed project will not conflict, or provides appropriate mitigations, with regard to applicable local policies or ordinances as result of treatment activities. Therefore, no impact is expected to occur.

Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	Impact BIO-8, 3.6	No Impact	N/A	NoNo	N/AN/A	☒

The proposed project treatments are located outside of any habitat conservation plans (HCP) or natural community conservation plans (NCCP). Therefore, this project would not conflict with any HCP's or NCCP's and no impact is expected to occur.

Other Impacts to Biological Resources: Would the project result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed project treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent 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 (CalVTP Final PEIR Volume II Section 3.6.1 and 3.6.2). no changed circumstances would give rise to 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.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR BIO-1: Review and Survey Project-Specific Biological Resources. 1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.** 2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. This SPR applies to all treatment activities and treatment types.	YesYes YesYes NoNo	SMRCD PriorPrior	CAL FIRE

Per SPR BIO-1, a data review of project-specific biological resources and reconnaissance survey of the project area were conducted. The CalVTP Final PEIR Appendix BIO-3 Tables 1a and 1b were used to identify species known or with potential to occur within the Central California Coast ecoregion and their associated California Wildlife Habitat Relationship (CWHR) types that may be present within or in proximity to treatment areas. The CNDDB BIOS 5 and the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database were used to identify the state and federally listed species that may be present within 5 miles of the property boundary. The search yielded 37 federal and state threatened, endangered, or candidate species, CDFW species of special concern and candidate species, and the CNPS's California Rare Plant Rank (CRPR) List 1 and 2. The species reviewed are listed and impacts to each species are analyzed within the "Biological Resources Species List" (Attachment D). From the complete list of species, two of the special-status plants and eight of the special-status wildlife were determined to have potential to occur within the property boundaries (Attachment D, Table 1). A pre-treatment biological survey was completed by the San Mateo Resource Conservation District Biologist on May 10, 2021 and a biological resources survey report indicating that no special-status species have been identified within the project area has been completed (Attachment E).

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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
The implementation of this SPR will minimize the risk of an impact occurring to biological resources during operations.			
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
SPR BIO-1 determined that the project area contains a sensitive natural community, the Redwood Forest and Woodland Alliance, however, adverse impacts can be avoided. Treatments proposed will promote the health, resiliency, and heterogeneity of the residual stand by creating different influences of sunlight through the canopy to the forest floor adding to a mosaic of diversity in the understory. Please refer to Impact BIO-3 for further information.			
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
This project proposes the use of mechanical treatment outside of the WLPZ and will comply with overstory cover requirements in riparian areas.			
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. These SPR requirements apply to all treatment activities and all treatment types. Additional measures will be applied to ecological restoration treatment types	NoNo	N/AN/A	
The project area does not contain any coastal sage scrub or chaparral communities, therefore, this SPR does not apply to this project.			
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 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). This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The project area contains species infected with *Phytophthora ramorum,* or Sudden Oak Death (SOD), therefore, this SPR will be implemented to prevent the spread of the pathogen. This project proposes that chipped material containing material infected with the pathogen only be chipped and spread back into areas already impacted by the pathogen. Please see the discussion on SOD above in *Item #8, Project Description, Pests and Diseases.*			

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." This SPR applies to all treatment activities and treatment types.	NoNo	N/AN/A	
Per SPR BIO-1, it has been determined that suitable habitat may be present for two special-status plant species, however, adverse impacts to thethe habitat for these species can be avoided. Therefore, this SPR does not apply.			
SPR BIO-8: Identify and Minimize Impacts in Coastal Zone ESHAs. This SPR applies to all treatment activities and only the ecosystem restoration treatment type.	YesYes	SMRCD Prior-DuringPrior-During	CAL FIRE
The project property is located within the Coastal Zone, therefore, this SPR applies to this project. Efforts have been made between the CCC, San Mateo Resource Conservation District and other similar entities to develop a Public Works Plan (PWP) document that establishes a set of standards for CalVTP projects occurring within the coastal zone within San Mateo and Santa Cruz Counties that allows further treatments than presented in SPR BIO-8. The DRAFT Camp Butano Creek PSA was sent to the CCC on April 23, 2021 for review. A Coastal Vegetation Treatment Standards (CVTS) document has been filled out for this project and was submitted to the CCC on April 23, 2021 for review with the PSA (Attachment G). All of the Coastal Zone has been identified as ESHA in San Mateo County by the CCC. The basis of this project is to conduct ecologically restorative treatments that promote the persistence and resiliency of the redwood forest type as an environmentally sensitive habitat area through a myriad of protection, conservation, and avoidance measures. The vegetation removal hierarchy, as outlined in the attached Coastal Vegetation Treatment Standards document, is as follows: (1) thinning and removal of dead, dying and diseased foliage, shrubs (except that some snags should be retained to provide wildlife shelter, dens, etc.); (2) removal of invasive species; and (3) removal of native species that are not listed as endangered, threatened, rare, or otherwise especially valuable, with the end goal of having appropriate species composition maintained in the plant community with a mix of vegetation age, height and density in accordance with the standards (membership rules) set forth by the second edition of the Manual of California Vegetation (Attachment G). The treatment activities will reduce potential ignition sources, improve the forest's health and vigor, and promote a more resilient forest (see *Initial* and *Maintenance Treatment Descriptions*).			
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The project area contains French Broom, therefore, this SPR applies to this project. Further information regarding the treatment of French Broom is located in the discussion on French Broom above under *Item #8, Invasive Species.*			

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) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. This SPR applies to all treatment activities and treatment types.	NoNo	N/AN/A	
Adverse impacts to p~~P~~otentially suitable habitat for special-status wildlife species or nurseries resulting from the completion of SPR BIO-1 can be avoided during operations, therefore, this SPR does not apply.			
SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). This SPR applies only to prescribed herbivory and all treatment types.	NoNo	N/AN/A	
This project does not include prescribed herbivory, therefore, this SPR does not apply.			
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 or peak nesting season will be defined by the qualified RPF or biologist. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The implementation of this SPR and the provisions outlined in Impact BIO-6 will minimize the risk of disturbing or impacting common nesting birds, including raptors during operations.			
MM 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).	NoNo	N/AN/A	
A pre-treatment botanical survey was completed by the San Mateo Resource Conservation District Biologist on May 10, 2021 and a botanical survey report indicating that no special-status species listed under ESA or CESA have been identified within the project area has been completed (Attachment E). Therefore, Mitigation Measure BIO-1a does not apply to this project.			
MM 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 measures to avoid loss of individuals and maintain habitat function of occupied habitat.	NoNo	N/AN/A	

A pre-treatment botanical survey was completed by the San Mateo Resource Conservation District Biologist on May 10, 2021 and a botanical survey report indicating that no special-status species not listed under ESA or CESA have been identified within the project area has been completed (Attachment E). Therefore, Mitigation Measure BIO-1b does not apply to this project.			
MM 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. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.	NoNo	N/AN/A	
A pre-treatment botanical survey was completed by the San Mateo Resource Conservation District Biologist on May 10, 2021 and a botanical survey report indicating that no special-status plant species have been identified within the project area has been completed (Attachment E). Therefore, Mitigation Measure BIO-1c does not apply to this project. If operations result in the discovery of special-status plant species in the project area, it is expected that the avoidance of the species as outlined in Mitigation Measures 1a and 1b will be feasible and further compensatory mitigations will not be necessary.			
MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)	YesYes	SMRCD DuringDuring	CAL FIRE
Utilizing Table 3.6-33 in the PEIR, the special-status species that have potentially suitable habitat within the project area are categorized into the following life history groupings: Amphibians and Reptiles, Bats, Burrowing or Denning Wildlife, and Tree-nesting and Cavity-nesting Wildlife (CalVTP Final PEIR Volume II Section 3.6.3, Table 3.6-33). Therefore, this Mitigation Measure will be implemented to minimize residual impacts after the application of the SPR's.			
MM 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. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.	YesYes	SMRCD DuringDuring	CAL FIRE
Utilizing Table 3.6-33 in the PEIR, the special-status species that have potentially suitable habitat within the project area are categorized into the following life history groupings: Amphibians and Reptiles, Bats, Burrowing or Denning Wildlife, and Tree-nesting and Cavity-nesting Wildlife (CalVTP			

Final PEIR Volume II Section 3.6.3, Table 3.6-33). Therefore, this Mitigation Measure will be implemented to minimize residual impacts after the application of the SPR's. Based on the CNDDB findings, site-specific review, biological surveys, and the determination of qualified RPFs, any potential impact during initial and maintenance treatments that could cause mortality, injury, loss of habitat function, or disturbance to any special-status listed wildlife species would be less than significant and wildlife would most likely benefit from the proposed treatments.			
MM 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. 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.	NoNo	N/AN/A	
This Mitigation Measure will not be implemented because the provisions outlined in Mitigation Measures BIO-2a and BIO-2b can be implemented and no additional mitigation or compensatory mitigation would be necessary to reduce significant impacts. Therefore, this Mitigation Measure does not apply to this project.			
MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)	NoNo	N/AN/A	
The project area does not contain potentially suitable habitat for the Valley Elderberry Longhorn Beetle; therefore, this Mitigation Measure does not apply.			
MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.	NoNo	N/AN/A	
The project area does not contain potentially suitable habitat for special-status butterflies; therefore, this Mitigation Measure does not apply.			
MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)	NoNo	N/AN/A	
The project area does not contain potentially suitable habitat for special-status beetles, flies, grasshoppers, or snails; therefore, this Mitigation Measure does not apply.			

MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.	NoNo	N/AN/A	
The project area does not contain potentially suitable habitat for special-status bumble bees; therefore, this Mitigation Measure does not apply.			
MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)	NoNo	N/AN/A	
This project does not include prescribed herbivory; therefore, this Mitigation Measure does not apply.			
MM 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: The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.	NoNo	N/AN/A	
The project area contains redwood forests, which is considered a sensitive natural community. However, this project falls under the exception for this Mitigation Measure because it has been determined by qualified RPFs that the sensitive natural community would benefit from treatments in the occupied habitat. Please see the substantial evidence provided in *Impact BIO-3*.			
MM 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 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.	NoNo	N/AN/A	
This Mitigation Measure does not apply because significant impacts to sensitive natural communities can be avoided. Please refer to Impact BIO-3 for information regarding sensitive natural communities.			
MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat 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.	NoNo	N/AN/A	
This project proposes the use of mechanical treatments outside of the WLPZ and will comply with overstory cover requirements in riparian areas.			

MM BIO-4: Avoid State and Federally Protected Wetlands	NoNo	N/AN/A	
The project area does not contain state and federally protected wetlands; therefore, this Mitigation Measure does not apply.			
MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites	NoNo	N/AN/A	
No nursery sites or nursery habitats were identified in the project area during the field visit with CDFW on August 10, 2020 or throughout the duration of project layout. Therefore, Mitigation Measure BIO-5 does not apply to this project.			

Refer to Attachment D, Attachment E, and Attachment F, for guidance on the project-specific review and survey procedures for biological resources.

SPECIES STATUS SUMMARY TABLE

Results of Listed Species Found in the CNDDB Query

WILDLIFE	STATUS			HABITAT
COMMON NAME **SCIENTIFIC NAME**	**FED**	**STATE**		
Santa Cruz black salamander *Aneides niger*	--	SSC	--	This species occurs in mixed deciduous woodland, coniferous forests, and coastal grasslands in California. This species can be found in riparian areas near streams and under damp debris, but do not inhabit streams.
	-			
pallid bat *Antrozous pallidus*	--	SSC	--	This species favors rocky outcrops in semi-arid climates within grasslands, chaparral, oak woodlands, and coniferous forests. The pallid bat diet consists of ground-dwelling prey like small mammals or reptiles and large flying or ground-dwelling insects.
	-			
marbled murrelet *Brachyramphus marmoratur*	TH	E	--	This species favors nesting sites in old-growth coniferous forests or rocky talus slopes near the Pacific Ocean, up to approximately 15 miles inland. The marbled murrelet nests on large branches approximately 4 inches in diameter or larger that create a platform that may be screened from predators or wind by branches of nearby trees, where the female will lay one yellow, olive, or blue-green egg with brown, black, and lavender specks. This seabird forages in coastal marine habitats, dieting on primarily fish and crustaceans.
	-			
western bumble bee *Bombus occidentalis*	--	CE	--	This is a pollinator species that associates with a wide range of flowering plants and crops within open coniferous, deciduous and mixed-woodland forests, wet and dry

				meadows. The western bumble bee is capable of foraging in cold, rainy weather conditions and commonly nests underground.
	-			
western snowy plover *Charadrius alexandrines nivosus*	TH	--	--	This species favors coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, and estuaries at the mouths of rivers or creeks. The western snowy plover breeds above high tide lines and nests are generally located on flat, open areas where females will lay approximately 2-6 eggs.
	-			
Townsend's big eared bat *Corynohinus townsendii*	--	SSC	--	This species favors dense coniferous forests, native prairies, and coastal communities usually below 3,300 meters elevation. This bat prefers dark, open caves or cliffs in cold areas for roosting and does not roost in rock crevices. The primary food source for this species is moths, however, beetles and other small insects are also common.
	-			
California giant salamander *Dicamptodon ensatus*	--	SSC	--	The California giant salamander requires habitat with cover for hiding, sun protection, and breeding and can be found under rocks, logs, or stones. This species' aquatic habitat consists of lakes, ponds, rivers, streams, or fast-moving water. Females deposit 85-200 eggs underwater and protect the eggs until they hatch. This species has a relatively slow reproduction rate due to long gestation period and they do not reach sexual maturity until they are 5-6 years old.
	-			
western pond turtle *Emys marmorata*	--	SSC	--	The habitat for this species consists of aquatic and terrestrial environments, including lakes rivers, streams, ponds, wetlands, vernal pools, creeks, reservoirs, agricultural ditches, estuaries, and brackish waters. Adults favor deep waters while juveniles favor shallow waters, however, both prefer slow moving water. Terrestrial habitats consist of burrows in leaves or soil during the winter season. Nests are built away from water in flat areas with short vegetation and dry soils. The western pond turtle feeds on crustaceans, midges, fish, dragonflies, beetles, and other invertebrates and algae or plant material. Development is a threat to this species.
	-			
tidewater goby *Eucyclogobius newberryi*	E	--	--	The tidewater goby favors shallow, brackish waters at the mouth of freshwater streams and coastal lagoons. This species feeds on crustaceans, dipteran larvae, gastropods, and invertebrate eggs.
	-			
American peregrine falcon *Falco peregrinus anatum*	--	SSC	--	The peregrine falcon occurs primarily in coastal areas with open landscapes. This species nests in cliffs along rivers and the coastline. The nests are simply depressions in the ledges formed from the peregrine falcon scraping the sand, gravel, or substrate

				to approximately 2 inches deep. The peregrine falcon lays 2-5 pale brown eggs that are dotted with red, brown, or purple. The primary diet of this species is shorebirds and bats, but also prey on small rodents and fish.
	-			
saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	--	SSC	--	This species prefers herbaceous wetland and salt marsh communities usually below 450 meters elevation. Small, cup-shaped nests are usually well-hidden by tall vegetation less than approximately 1 meter above ground. Females will lay 3-6 white eggs with dark spots on one end of the egg. This species primarily consumes insects like spiders and caterpillars.
	-			
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	--	SSC	--	This species prefers moderate canopy coverage in oak woodland, chaparral or shrubland, and coniferous forest communities. The San Francisco dusky-footed woodrat builds complex nests from sticks and debris that can reach up to approximately 8 feet wide and 6 feet tall. Nests are typically occupied by a single adult, except for a short period of time after the female gives birth to her pups. The diet for this species consists of woody plant species such as maple, coffeeberry, alder, live oak, and elderberry.
	-			
steelhead – central California coast *Onchorhynchus mykiss irideus pop.8*	T	--	--	This is an anadromous fish species that occurs in freshwater Pacific coast streams. This steelhead species will migrate to marine waters once it nears maturity, then returns to freshwater streams for spawning. Typically, this species requires a minimal of approximately 7 inches of water depth for migration and favors spawning habitat between 6 and 24 inches deep, usually in slow moving currents. High water velocities and low water depth can impede on this species' capability to migrate.
	-			
mountain lion *Puma concolor*	--	CE	--	This species prefers dense vegetative areas within mountain ranges of coniferous forests, scrub and oak woodlands, and arid communities. Mountain lions are territorial, and development has limited their available habitat. This species is an opportunistic hunter that primarily feeds on deer, farm animals, and small mammals such as coyotes, raccoons, and feral pigs.
	-			
foothill yellow-legged frog *Rana boylii*	--	E	--	Habitat is primarily foothill and mountain streams with rocky substrate in open, sunny banks within forests, chaparral, or woodland communities.
	-			
California red-legged frog *Rana draytonii*	TH	SSC	--	Common habitat consists of locations near ponds or along streams in humid forests, grasslands, and coastal scrub communities that contain plant cover. This species

				breeds in permanent water sources and requires moist refuges, like animal burrows, for cover in the dry season.
	-			
bank swallow *Riparia riparia*	--	TH	--	This species favors coastal habitats within holes dug out of cliffs and riverbanks with fine textured, sandy soils near a source of water. Burrows are dug by the males and can reach approximately 25 inches into the bank, where females lay approximately white 3-5 eggs. Feeding occurs primarily over grassland, shrubland, cropland, and open riparian areas and consists of soft-bodied insects.
	-			
Myrtle's silverspot butterfly *Speyeria zerene myrtleae*	E	--	--	This species favors habitat within 3 miles of the coast that is sheltered from wind within coastal dune and coastal prairie habitat and below 250 meters in elevation. Myrtle's silverspot butterfly relies on plants such as gum plant (*Grindelia rubicaulis*), yellow sand verbena (*Abronia latifolia*), coyote mints (*Monardella spp.*), bull thistle (*Cirsium vulgare*), and seaside daisy (*Erigeron glaucus*) as sources of nectar and violets, specifically *Viola adunca*, for laying eggs and larval food.
	-			
longfin smelt *Spirinchus thaleichthys*	CTH	TH	--	This species is euryhaline, meaning it can tolerate a wide range of salinities, and favors nearshore waters, estuaries, and lower freshwater streams. The longfin smelt forages on small shrimp-like crustaceans, such as opossum shrimp.
	-			
American badger *Taxidea taxus*	--	SSC	--	Habitat consists of open areas such as prairies, farmland, and plains as well as edges of woods. The American badger is a nocturnal carnivore and its diet primarily consists of small rodents, reptiles, birds, and insects.
	-			
San Francisco gartersnake *Thamnophis sirtalis tetrataenia*	E	FP	--	This species favors openings in grasslands or wetland areas near ponds, marshes, or sloughs and is capable of swimming. During the dry season, the San Francisco garter snake may become dormant in rodent burrows. The primary diet consists of amphibians, small mammals, reptiles, earthworms, slugs, slugs an leeches.
	-			

Species Status Identifiers Used on the Table

DL– Delisted **E** – Endangered **CE** – Candidate Endangered **CTH** – Candidate Threatened **TH**– Threatened **PTH** – Potential Threatened

N – None **NL** – Not Listed **R** – Rare **WL** – Watch List **SSC** – DFG Species of Special Concern **FP –** Fully Protected

PLANTS (PROVIDED BY CDFW)	STATUS		HABITAT	
COMMON NAME SCIENTIFIC NAME	**FED**	**STATE**	**CNPS LIST**	
Blasedale's bentgrass *Agrostis blasdalei*	--	--	1B.2	This species favors full sun coastal dunes within coastal strand, northern coastal scrub, and coastal prairie communities.
Anderson's manzanita *Arctostaphylos andersonii*	--	--	1B.2	This species grows in openings in redwood forests or near forest edges, usually below 700 meters (2300 feet) elevation. The Anderson manzanita favors hot areas in broadleaved upland forests, chaparral communities, and North coast coniferous forests.
coastal marsh milk-vetch *Astragalus pycnostachyus var. pycnostachyus*	--	--	1B.2	The coastal marsh milk-vetch favors cool areas in coastal dune or scrub communities and often favors moist areas in marshes and swamps along the coast, usually in elevations below 155 meters.
San Mateo woolly sunflower *Eriophyllum latilobum*	--	--	1B.1	This species favors oak woodlands and grows in foothill woodland, cismontane woodland, coastal scrub, lower montane coniferous forest usually in elevations between 45 and 330 meters.
minute pocket moss *Fissidens pauperculus*	--	--	1B.2	Minute pocket moss grows on bare, moist soil banks commonly near the base of redwood trees.
Toren's grimmia *Grimmia torenii*	--	--	1B.3	This species favors rocky openings within chaparral, cismontane woodland, and lower montane coniferous forest communities between 325 and 1160 meters elevation.
Butano Ridge cypress *Hesperocyparis abramsiana var. butanoensis*	--	--	1B.2	This species is known only to occur along the Butano Ridge within the Santa Cruz Mountains within chaparral or closed-cone pine forest communities between 400 and 490 meters in elevation.
perennial goldfields *Lasthenia californica ssp. macrantha*	--	--	1B.2	This species favors grasslands and dunes along the coast within northern coastal scrub communities below 500 meters elevation.
rose leptosiphon *Leptosiphon rosaceus*	--	--	1B.1	This species favors open, grassy slopes within coastal bluff scrub communities below 100 meters elevation.
Point Reyes meadowfoam *Limnanthes douglasii spp. sulphurea*	--	--	1B.2	This species favors full-sun locations within wetland and coastal prairie communities on the edges of meadows, freshwater-marshes, and vernal-pools, generally below 3,300 feet in elevation.

marsh silverpuffs *Microseris paludosa*	--	--	1B.2	This species favors moist grasslands or open woodlands within northern coastal scrub, cismontane woodland, valley and foothill grassland, or closed-cone pine forest communities below 300 meters elevation.
Kellman's bristle moss *Orthotrichum kellmanii*	--	--	1B.2	This species favors sandstone and carbonate rocks within chaparral and cismontane woodlands between 343 and 685 meters elevation.
Choris' popcornflower *Plagiobothrys chorisianus var. chorisianus*	--	--	1B.2	This species grows in moist, grassy areas in wetlands or ephemeral drainages. The Choris' popcornflower favors coastal prairie, chaparral, northern coastal scrub, and wetland-riparian communities below 240 meters elevation.
San Francisco popcornflower *Plagiobothrys diffuses*	--	--	1B.1	This species favors sparsely vegetated areas within coastal prairie and valley grassland communities between 30 and 150 meters in elevation.
Scouler's catchfly *Silene scouleri ssp. scouleri*	--	--	2B.2	This species favors rocky slopes and coastal bluffs within northern coastal scrub or valley and foothill grassland communities below 600 meters elevation.
Santa Cruz microseris *Stebbinsoseris decipiens*	--	--	1B.2	This species favors open, serpentinite areas within northern coastal scrub, closed-cone pine forest, mixed evergreen forest, chaparral, and coastal prairie communities below 500 meters elevation.

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	Impact Geo-1, 3.7	LTS	SPR GEO-1, 2, 3, 4, 5, 6, 7, 8, SPR HYD-3 SPR AQ- 3 SPR HYD- 4	YesYes	LTSLTS	☒
Initial and maintenance treatments include mechanical treatments and manual treatments that would disturb topsoil and reduce vegetative cover, which has the potential to increase rates of erosion and topsoil loss. The potential for these treatments to result in substantial erosion and loss of topsoil was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.7.3, page 26-29). The potential impacts are within the scope of the PEIR because the treatment activities are consistent and will comply with applicable SPR's, including SPR GEO-1 through 5, GEO-7, GEO-8, and HYD-4. All equipment will be limited to operating on slopes less than 40% but may utilize access routes that are 50% or less. The average slope of mechanical operations throughout the treatment areas ranges from approximately 20-30%. Operations will not occur while soils are saturated to avoid disturbances caused by the removal of vegetation. Although treatments will remove vegetation and disturb topsoil, the implementations of the SPR's, slope limitations, and soil condition limitations indicate that the potential for this project impact to have substantial erosion and loss of topsoil would be less than significant.							
Impact GEO-2: Increase Risk of Landslide	Impact Geo-2, 3.7	LTS	SPR GEO-3, 4, 7, 8, SPR AQ- 3	YesYes	LTSLTS	☒
The mechanical and manual treatments included in the initial and maintenance treatments will result in the reduction of vegetative cover and may affect root structure, decreasing the stability of slopes, which could increase the risk of landslide. The potential for these treatments to increase the risk of landslide was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.7.3, page 29-30). The prescription for these treatments limits mechanical operations to slope equal to or less than 40% and limits equipment access to slopes equal to or less than 50%. The average slope of operation throughout the treatment areas ranges from approximately 20-30%. Equipment will not operate on saturated soils to avoid disturbances caused by the removal of vegetation. The implementation of the applicable SPR's, including SPR GEO-3, GEO-4, GEO-7, and GEO-8,							

will minimize the risk of a landslide resulting from the prescribed treatment activities. Based on the equipment operation limitations and implementation of SPR's, the potential for this impact to increase the risk of landslide will be less than significant.						
Other Impacts to Geology, Soils, Paleontology, And Mineral Resources: Would the project result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatments are consistent with the treatment types and activities evaluated in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and has determined they are consistent with the environmental and regulatory settings discussed in the PEIR (CalVTP Final PEIR Volume II 3.7.1 and 3.7.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact to geology, soils, paleontology, or mineral resources would occur that is not covered in the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
Mechanical treatments will be suspended during heavy precipitation events to minimize the risk of soil compaction and disturbance. This project does not propose prescribed herbivory or herbicide treatments.			
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. This SPR applies only to mechanical treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
Contractors will avoid driving heavy equipment and other high ground pressure vehicles on saturated soils to minimize the risk of soil compaction and disturbance.			
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. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE

The implementation of this SPR will stabilize soils following the proposed mechanical treatments. This project proposes chipping materials and scattering the chips within the treated areas, which will reduce the amount of exposed bare soil following treatments.			
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. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types.	YesYes	SMRCD During-PostDuring-Post	CAL FIRE
The implementation of this SPR will minimize the risk of erosion occurring within treatment areas following mechanical treatments.			
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. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	YesYes	SMRCD During-PostDuring-Post	CAL FIRE
The implementation of this SPR will direct stormwater runoff to minimize the risk of erosion occurring within treatment areas or road infrastructure utilized during operations following mechanical and manual treatments that may compact or disturb soils.			
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. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not include burn piles, therefore, this SPR does not apply to this project.			
SPR GEO-7 Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads. This SPR applies to all treatment activities and all treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The proposed mechanical treatments are limited to slopes equal to or less than 40% and equipment access is limited to slopes equal to or less than 50% and the average slope of operation throughout the treatment areas ranges from approximately 20-30%. Please see SPR AD-3 for information regarding consistency with the San Mateo County LCP Policy 9.18 – Regulation of Development on 30% or Steeper Slopes.			
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). This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types.	NoNo	N/AN/A	
The proposed mechanical treatments are limited to slopes equal to or less than 40% and equipment access is limited to slopes equal to or less than 50% and the average slope of operation throughout the treatment areas ranges from approximately 20-30%, therefore, SPR GEO-8 does not apply to this project. Please see SPR AD-3 for information regarding consistency with the San Mateo County LCP Policy 9.18 – Regulation of Development on 30% or Steeper Slopes.			

EC-7: GREENHOUSE GAS EMISSIONS

	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GHG-1: Conflict with applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs	Impact GHG-1, 3.8	LTS	SPR GHG- 1	YesYes	LTSLTS	☒
During initial and maintenance treatments, the use of vehicles and mechanical equipment would result in greenhouse gas (GHG) emissions. The potential for these treatments and treatment activities to result in a conflict with the applicable plans, policies, and regulations regarding GHG emissions was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.8.3, page 10-11). The proposed project is consistent with all applicable plans, policies, and regulations related to the purpose of reducing GHG emissions and treatment activities area consistent with those analyzed in the PEIR. The project impacts relating to the consistency of treatments with the applicable plans, policies, and regulations will remain less than significant.							
Impact GHG-2: Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, 3.8	PSU	SPR AQ- 3 MM GHG- 2	YesYes	PSUPSU	☒
The use of vehicles and mechanical equipment during initial and maintenance treatments would result in GHG emissions. The potential for treatments to generate GHG emissions was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.8.3, page 11-17). In the long-term, the treatment activities are expected to have carbon sequestration benefits and are intended to reduce the risk of wildfire, which would decrease projected GHG emissions. Based on the tree fuel types listed in the CalVTP Table 3.8-3, mechanical treatments are estimated to produce approximately 36.2 MTCO2e, or 0.92 MTCO2e/acre, and manual treatments are estimated to produce approximately 3.5 MTCO2e, or 0.69 MTCO2e/acre, for a total of approximately 39.7 MTCO2e produced by this project. The estimated calculation derived from the values in the CalVTP PEIR Table 3.8-3 does not include the GHG emissions from vehicle transport, including the transportation of equipment and contractors. CalVTP PEIR Table 3.8-2 indicates that in 2008, the largest fire year displayed in the table, 1.35 million acres burned producing approximately 45.7 MMTCO2. As of October 2020, approximately 4 million acres have burned in California, which is approximately three times more acres and MMTCO2 produced than in 2008. Implementing the treatment activities for this project would produce significantly less MTCO2 than an average wildfire year and would create an opportunity for wildfire to be stopped or slow the rate of spread. The GHG emissions produced from this							

treatment project are within the scope of the impacts evaluated in the PEIR because the proposed activities, equipment and duration of use, and the intent of the treatments to reduce wildfire risk and GHG emissions associated with wildfire are consistent with those analyzed in the PEIR. Therefore, the potential for the project treatment activities to result in GHG emissions is considered potentially significant and unavoidable, as stated in the PEIR (CalVTP Final PEIR Volume II Section 3.8.3, page 17).

Other Impacts to related to Greenhouse Gases: Would the project result in other impacts related to greenhouse gases that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment 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 are consistent with the environmental and regulatory settings as stated in the PEIR (CalVTP Final PEIR Volume II 3.8.1 and 3.8.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact regarding GHG emissions would occur that is not covered in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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.	YesYes	SMRCD DuringDuring	CAL FIRE
The project proponent will comply with SPR GHG-1 to provide all necessary data required by the USFS and FRAP to fulfill AB 1504.			
MM GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns. 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.	NoNo	N/AN/A	
This project does not propose prescribed burns, therefore, this Mitigation Measure does not apply to this project.			

EC-8: ENERGY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	Impact ENG-1, 3.9	LTS	N/A	YesYes	LTSLTS	☒
The use of vehicles, mechanical equipment, chainsaws, and other mechanized hand tools during initial and maintenance treatments will result in the consumption of energy. The potential for impacts to result in wasteful, inefficient, or unnecessary consumption of energy and the use of fossil fuels was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.9.3, page 7-8). The consumption of energy during the project treatment activities is within the scope of the impacts addressed in the PEIR because the treatment activities, the equipment and its duration of use, are consistent with those analyzed in the PEIR. There are no applicable SPR's or mitigation measures for this project impact, however, idle time for all equipment will be limited and crews will be encouraged to carpool to reduce the amount of energy consumed throughout the duration of this project. Therefore, the potential for this project to result in significant wasteful, inefficient, or unnecessary energy consumption remains less than significant.						
Other Impacts to Energy Resources: Would the project result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities discussed in the CalVTP PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined that they are consistent with the regulatory and environmental setting conditions developed in the PEIR (CalVTP Final PEIR, Volume II, 3.9.1 and 3.9.2). No changed circumstances would lead to significant impacts not addressed in the PEIR. Therefore, no new impact related to energy resources would occur that is not covered in the PEIR.						

EC-9: HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, 3.10	LTS	SPR HAZ- 1	YesYes	LTSLTS	☒
The initial and maintenance treatments would include mechanical treatments and manual treatments, both of which would require the use of hazardous materials. The potential for treatment activities to create a significant health hazard from the use of hazardous materials was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.10.3, page 14-15). The potential impacts related to the use of fuels during treatment activities are within the scope of the activities and impacts discussed in the PEIR because the treatment types, equipment, and types of hazardous materials to be used are consistent with those analyzed in the PEIR. 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. 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.						
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, 3.10	LTS	SPR HAZ- 5, 6, 7, 8, 9	NoNo	N/AN/A	☒
This project does not propose the use of herbicides, therefore, this impact does not apply to this project.						
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, 3.10	PS	MM HAZ- 3	YesYes	LTSMLTSM	☒
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, 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 naturally occurring asbestos 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.						
Other Impacts to Hazardous Materials, Public Health and Safety: Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?				No	N/A	☒
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.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
Mechanical and manual treatment crews will maintain all equipment in compliance to SPR HAZ-1 to minimize the risk of impacts resulting from leaks.			
SPR HAZ-2 Require Spark Arrestors: This SPR applies only to manual treatment activities and all treatment types	YesYes	SMRCD DuringDuring	CAL FIRE
Manual treatment crews will utilize mechanized hand tools that contain spark arrestors.			
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.	YesYes	SMRCD DuringDuring	CAL FIRE
Manual treatment crews will carry one fire extinguisher per chainsaw and vehicles will be equipped with one long-handled shovel and one axe or Pulaski.			

SPR HAZ-4 Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
Contractor crews shall not smoke in vegetated areas during operations.			
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. This SPR applies only to herbicide treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose the use of herbicides, therefore, this SPR does not apply.			
SPR HAZ-6 Comply with Herbicide Application Regulations. This SPR applies only to herbicide treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose the use of herbicides, therefore, this SPR does not apply.			
SPR HAZ-7 Triple Rinse Herbicide Containers. This SPR applies only to herbicide treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose the use of herbicides, therefore, this SPR does not apply.			
SPR HAZ-8 Minimize Herbicide Drift to Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose the use of herbicides, therefore, this SPR does not apply.			
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose the use of herbicides, therefore, this SPR does not apply.			
MM 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.	YesYes	SMRCD PriorPrior	CAL FIRE
The project proponent has completed pre-operational research to determine that there are not any sites known to have previously used, stored, or disposed of hazardous materials within the project area.			

EC-10: HYDROLOGY AND WATER QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
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	Impact HYD-1, 3.11	LTS	SPR HYD- 4 SPR AQ- 3 SPR BIO- 4, 5 SPR GEO-4, 6 MM BIO- 3b	NoNo	N/AN/A	☒
This impact does not apply to the proposed treatment activities because prescribed burning is not a proposed treatment type for this project. Therefore, no impact will occur as a result of prescribed burning.						
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	Impact HYD-2, 3.11	LTS	SPR HYD- 1, 4, 5 SPR BIO- 1 SPR GEO- 1, 2, 3, 4, 7, 8 SPR HAZ- 1, 5	YesYes	LTSLTS	☒
Initial and maintenance treatments would include the use of mechanical and manual treatments, which would result in ground disturbance. The potential for mechanical and manual treatments to violate water quality regulations or degrade water quality was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.11.3, page 27-28). Potential impacts are within the scope of the activities and impacts evaluated in the PEIR because the use of equipment and associated impacts to water quality are consistent with those analyzed in the PEIR. Girl Scout Creek, a Class II						

watercourse, runs through the project area and is in proximity to some treatment areas, where the Watercourse and Lake Protection Zones shall be delineated and flagged with an appropriate buffer based on slope prior to operations. The centerline of Class III watercourses shall be flagged prior to operations where equipment could potentially cross a Class III due to treatment area proximity and slope. Equipment exclusion zones of 25-feet for slopes less than 30% and 50' for slopes greater 30% shall be adhered to in this CalVTP. The project proponent will implement SPR GEO-1 through GEO-4, GEO-7, GEO-8, BIO-1, HAZ-1, HYD-1 and HYD-4 to avoid and minimize the risk of substantial degradation to surface or groundwater quality from mechanical treatment activities. Based on avoidance measures and implementation of SPR's, the potential for this project to result in a violation of water quality standards or waste discharge requirements, degradation of surface and ground water quality, or conflict with or obstruct the Water Quality Control Plan would be less than significant.						
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	Impact HYD-3, 3.11	LTS	SPR HYD- 3	NoNo	N/AN/A	☒
This impact does not apply to the initial or maintenance treatments because prescribed herbivory would not be used as a treatment activity for this project. Therefore, no impact would occur as a result of prescribed herbivory.						
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	Impact HYD-4, 3.11	LTS	SPR HYD- 5 SPR BIO- 4 SPR HAZ- 5, 7	NoNo	N/AN/A	☒
This impact does not apply to the initial or maintenance treatments because herbicide application would not be used as a treatment activity for this project. Therefore, no impact would occur as a result of herbicide application.						
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	Impact HYD-5, 3.11	LTS	SPR HYD- 4, 6 SPR GEO- 5	YesYes	LTSLTS	☒
The initial and maintenance treatments include the use of mechanical treatment, which would result in ground disturbance. The potential for mechanical treatment to substantially alter existing drainage patterns of a project site was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.11.3, page 30-31). The potential impacts are within the scope of the activities and impacts addressed in the PEIR because the use of equipment and treatment activities are consistent with those analyzed in the PEIR. The Girl Scout Creek, a Class II watercourse, Watercourse and Lake Protection Zones shall be flagged in areas in proximity to treatment areas with an appropriate buffer based on slope prior to operations. All Class III watercourses will be flagged prior to operations where equipment could potentially cross a Class III due to project proximity and slope. Chips should not be placed in watercourses or near culverts. The implementation of SPR HYD-1, HYD-2, HYD-4, and HYD-6 would avoid and						

minimize the risk of substantially altering the existing drainage pattern of the treatment area through compliance to water quality regulations, avoiding construction of new roads, identifying and protecting the WLPZ, and protecting existing drainage systems. Therefore, any impact would be less than significant.						
Other Impacts to Hydrology and Water Quality: Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities addressed in the PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental settings discussed in the PEIR (CalVTP Final PEIR, Volume II, 3.11.1 and 3.11.2). No changed circumstances would lead to new significant impacts not analyzed in the PEIR. Therefore, no new impact related to hydrology and water quality would occur not covered in the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD Prior-DuringPrior-During	CAL FIRE
This project will comply with the San Francisco Bay Regional Water Quality (Region 2) Waste Discharge Requirements (WDRs) and/or Conditional Waivers of Waste Discharge Requirements, and San Francisco Bay Basin Plan Prohibitions.			
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.	YesYes	SMRCD DuringDuring	CAL FIRE
No new roads will be constructed under this project.			
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: This SPR applies to prescribed herbivory treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose prescribed herbivory, therefore, this SPR does not apply.			

SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916 .5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD Prior-DuringPrior-During	CAL FIRE
Girl Scout Creek is a Class II watercourse located in proximity to some treatment areas. The WLPZ for this watercourse shall be flagged prior to operations in compliance to appropriate buffers defined in 14 CCR Section 916.5 of the California Forest Practice Rules to minimize the risk of treatment activities resulting in an impact to watercourses.			
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: This SPR applies to herbicide treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not propose herbicide application, therefore, this SPR does not apply.			
SPR HYD-6 Protect Existing Drainage Systems: This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
All Class III watercourses in proximity to treatment areas and existing watercourse crossings shall be flagged prior to operations to exclude heavy equipment from accessing the watercourses and minimize the risk of mechanical treatments resulting in an impact to existing drainage systems.			

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	Impact LU-1, 3.12	LTS	SPR AD-3, 9	YesYes	LTSLTS	☒
The initial and maintenance treatments would occur on private property in Pescadero, San Mateo County, so the project would comply with all applicable city and county general plans, policies, or ordinances. The potential for treatment activities to cause a significant environmental impact due to the conflict with a land use plan, policy, or regulation was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.12.3, page 13-14). The treatment types and activities are within the scope of those evaluated in the PEIR because the treatment activities and associated impacts are consistent with those analyzed in the PEIR. The implementation of SPR AD-3 will avoid and minimize the risk of significant environmental impact due to conflict with a land use plan, policy, or regulation. Therefore, the impact would be less than significant.						

Impact LU-2: Induce Substantial Unplanned Population Growth	Impact LU-2, 3.12	LTS	N/A	YesYes	LTSLTS	☒
The initial and maintenance treatments would require approximately 20 crew members to implement. The potential for treatments to result in substantial population growth as a result of increases in demand for employees was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.12.3, page 14-15). Impacts associated with short-term increases in demand for employees during the implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the number of workers required for treatment implementation is consistent with the crew size analyzed in the PEIR for the types of treatments proposed. Employing local contractors will be encouraged where feasible to minimize the risk of impacting population and housing resources. There are no applicable SPR's for this impact. Based on the minimal crew size and attempting to hire local contractor, it is expected that any impact to population and housing as a result of this project would be less than significant.						
Other Impacts related to Land Use and Planning, Population and Housing: Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities covered in the PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory setting conditions discussed in the PEIR (CalVTP Final PEIR, Volume II, 3.12.1 and 3.12.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to land use and planning, population and housing would occur that is not covered in the PEIR.						

EC-12: NOISE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	Impact NOI-1, 3.13	LTS	SPR NOI-1, 2, 3, 4, 5, 6	YesYes	LTSLTS	☒

			SPR AD- 3			
The initial and maintenance treatments would include the use of mechanical and manual treatments that require heavy, noise-generating equipment. The potential for substantial short-term increase in ambient noise levels was analyzed in the PEIR (CalVTP Final PEIR Volume II Section 3.13.3, page 9-12). Short-term increases in noise from the use of heavy equipment is within the scope of the activities and impacts addressed in the PEIR because the types and number of equipment proposed, and the duration of use of the equipment are consistent with those analyzed in the PEIR. The implementation of SPR AD-3 and NOI-1 through NOI-6 would minimize the risk of increasing exterior ambient noise levels during treatment implementation. Therefore, the impact would be less than significant.						
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	Impact NOI-2, 3.13	LTS	SPR NOI- 1	YesYes	LTSLTS	☒
The initial and maintenance treatments would require large trucks to haul heavy equipment and crews to the project site. These haul trucks would pass by residential receptors, which could increase the single event noise levels (SENL). The potential for a substantial short-term increase in SENL was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.13.3, page 12). Short-term increases in noise from the use of heavy equipment during project implementation is within the scope of the treatment activities and impacts addressed in the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. All haul trips and use of heavy equipment will be limited to daytime hours to avoid sleep disturbance of nearby residents. SPR NOI-1 restricts treatment activities to daytime hours, which San Mateo County defines as 7:00am to 6:00 pm Monday through Friday or 9:00 am to 5:00 pm on Saturdays under SMC PRC Sec. 4.88.360 (e). Therefore, the impact would be less than significant.						
Other Impacts Related to Noise: Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities discussed in the PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental setting conditions addressed in the PEIR (CalVTP Final PEIR Volume II 3.13.1 and 3.13.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to noise would occur that is not analyzed in the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: 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.	YesYes	SMRCD DuringDuring	CAL FIRE
San Mateo County defines daytime hours as 7:00am to 6:00 pm Monday through Friday or 9:00 am to 5:00 pm on Saturdays under SMC PRC Sec. 4.88.360 (e).			
SPR NOI-2 Equipment Maintenance: 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.	YesYes	SMRCD DuringDuring	CAL FIRE
Implementation of this SPR will reduce the amount of ambient noise produced during operations.			
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.	YesYes	SMRCD DuringDuring	CAL FIRE
The implementation of this SPR will reduce the amount of ambient noise produced during operations.			
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD DuringDuring	CAL FIRE
The project property is a private property that hosts campers and staff seasonally. Equipment will be staged away from areas occupied by or frequented by campers and staff where feasible.			
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.	YesYes	SMRCD DuringDuring	CAL FIRE
The implementation of this SPR will reduce the amount of noise produced during operations.			
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. This SPR applies only to mechanical treatment activities and all treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
The project property is located in proximity to a community of homes located on Redwood Avenue and Canyon Road.			

EC-13: RECREATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	Impact REC-1, 3.14	LTS	SPR REC- 1	YesYes	LTSLTS	☒
The project area is located on private property designated for recreational use seasonally by campers and staff. The initial and maintenance treatments may result in conflicts with campers and staff due to potential restricted or limited property access, degradation of views, decreased air quality, or traffic during treatment implementation. 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 campers and staff about ecological restoration and fuel reductions in the wildland urban interface. Based on the implementation of SPR's and duration of the project, any impact to recreation as a result of this project would be less than significant.						
Other Impacts to Recreation: Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?				No	N/A	☒
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.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR REC-1 Notify Recreational Users of Temporary Closures. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure approximately 2 weeks prior to the commencement of the treatment activities. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD Prior-DuringPrior-During	CAL FIRE
The project area is located on private property with areas designated for recreational use by campers and staff. The implementation of this SPR will increase camper and staff safety during operations and will decrease traffic resulting from ingress/egress of heavy equipment.			

EC-14: TRANSPORTATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
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	Impact TRAN-1, 3.15	LTS	SPR TRAN- 1 SPR AD- 3	YesYes	LTSLTS	☒
The initial and maintenance treatments would temporarily increase vehicular traffic due to hauling equipment and crew transportation. The potential for a temporary increase in traffic to conflict with a program, plan, or policy addressing roadway facilities or prolonged road closures was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.15.3, page 9-10). No road closures would be necessary for the implementation of this project; however, Canyon Road will be crossed by equipment and crew vehicles during operations, which may require traffic control to reduce traffic impacts to residents of the Redwood Avenue community. The proposed treatment project would be short-term and temporary increases in traffic related to the treatments are within the scope of the activities and impacts addressed in the PEIR because the treatment duration and number of vehicles is consistent with those analyzed in the PEIR. The implementation of SPR AD-3 and TRAN-1 will reduce the risk of conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures through the implementation of traffic control during operations. Vehicles and equipment would be staged within camp boundaries, away from public viewsheds where feasible and not located on permanent roads. Based on the implementation of the applicable SPR's and the short duration of operations, any impact to traffic resulting from this project would be less than significant.						

Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, 3.15	LTS	SPR TRAN- 1 SPR AD-3	NoNo	N/AN/A	☒
This impact does not apply to the proposed project initial and maintenance treatments because they would not require the construction or alteration of any roadways and does not include prescribed burning. No impact would occur.						
Impact TRAN-3: Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, 3.15	PSU	MM AQ- 1	YesYes	PSUPSU	☒
Initial and maintenance treatments could temporarily increase vehicle miles traveled (VMT) because the project site is in a remote location, which requires vehicle trips to access the sites. The potential for net increase in VMT to occur was analyzed in the PEIR and was identified as potentially significant and unavoidable (CalVTP Final PEIR Volume II Section 3.15.3, page 11-13). This individual project is expected to require only a small number (fewer than the 110 trips threshold) of trips per day, as discussed in the PEIR and the Technical Advisory on Evaluating Transportation Impacts (OPR 2018). The most VMT would occur at the beginning and end of the project to haul equipment in and out of the project area. Daily VMT would consist of crew transportation to and from the site. Hiring local contractors will be encouraged where feasible to reduce the amount of VMT. No SPR's apply to this impact. The project proponent will implement Mitigation Measure AQ-1 to encourage crew members to carpool and further reduce VMT. Based on the implementation of Mitigation Measure AQ-1, measures to reduce VMT, and short-term duration of this project, the potential for this individual project to result in a net increase in VMT would remain potentially significant and unavoidable, as stated in the PEIR (CalVTP Final PEIR Volume II Section 3.15.3, page 12).						
Other Impacts to Transportation: Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities discussed in the PEIR. The project proponent has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental setting conditions presented in the PEIR (CalVTP Final PEIR Volume II 3.15.1 and 3.15.2). 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.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
The implementation of this SPR will determine if a TMP is needed for Canyon Road during operations.			

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	Impact UTL-1, 3.16	LTS	N/A	NoNo	N/AN/A	☒
This impact does not apply to the proposed treatments because it would not include prescribed burning and non-shaded fuel breaks that would require on-site water supplies for fire and dust suppression. No impact would occur.						
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	SU	SPR UTIL- 1	NoNo	N/AN/A	☒
The initial and maintenance treatments would generate biomass as a result of vegetation removal within the project site. Biomass generated would be chipped and scattered on-site because there is not a facility within an economically feasible distance to ship biomass off-site during this project, therefore, this impact does not apply to the project. This impact was evaluated in the PEIR and identified as potentially significant and unavoidable with no SPR's or Mitigation Measures because biomass hauled off-site could exceed the capacity of existing infrastructure handling biomass (CalVTP Final PEIR Volume II Section 3.16.3, page 10-12). Due to this project not including hauling biomass off-site, there is no potential to exceed the capacity of existing infrastructure and there would be no impact.						
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	Impact UTL-3, 3.16	LTS	SPR UTIL- 1	YesYes	LTSLTS	☒

Initial and maintenance treatments would generate biomass as a result of vegetation removal within the project site. The compliance with federal, state, and local management and reduction goals, statutes, and regulations related to solid waste was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.16.3, page 12). This project would not include hauling biomass off-site because all biomass generated would be chipped and scattered in the treatment areas. Compliance with all management and reduction goals, statutes, and regulations related to solid waste is within the scope of the activities and impacts addressed in the PEIR because the disposal of biomass on-site is consistent with those analyzed in the PEIR. SPR UTIL-1 does not apply to this project because no biomass will be hauled off-site. Based on the compliance with all applicable management and reduction goals, statutes, and regulations, the potential for impact would be less than significant.						
Other Impacts to Public Services, Utilities, and Service Systems: Would the project result in other impacts to public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities considered in the PEIR. The project proponent has considered the site-specific characteristics and determined that they are consistent with the regulatory and environmental setting conditions addressed in the PEIR (CalVTP Final PEIR, Volume II, 3.16.1 and 3.16.2). No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to public services, utilities, or service systems would occur that is not covered in the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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. This SPR applies only to mechanical and manual treatment activities and all treatment types.	NoNo	N/AN/A	
This SPR does not apply to this project because no biomass will be hauled off-site.			

EC-16: WILDFIRE

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

Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	Impact WIL-1, 3-17	LTS	SPR HAZ-2, 3, 4	YesYes	LTSLTS	☒
Initial and maintenance treatments would include mechanical treatments using heavy equipment and manual treatments using mechanized hand tools, which could exacerbate fire risk and expose people to uncontrolled spread of wildfire. The potential increase in exposure to wildfire during implementation of the proposed treatments was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.17.3, page 13-14). Increased wildfire risk associated with mechanical and manual treatments in vegetated areas is within the scope of the activities and impacts addressed in the PEIR because the equipment types and duration of use are consistent with those analyzed in the PEIR. SPR HAZ-2, HAZ-3, and HAZ-4 will be implemented to reduce the risk of exposure to wildfire by requiring spark arrestors for all mechanical hand tools, a fire extinguisher to be carried with each chainsaw, and restricting smoking areas to non-vegetated areas. Parts of this property, including some treatment areas, experienced a low severity to moderate severity burn during the 2020 CZU Lightning Complex Fires; following the fires, understory conditions include partially consumed, dead, and dried vegetative fuels, a component of regenerated understory fuels, and dead and downed debris and slash following high wind events along ridges. In addition, modeling fire behavior utilizing the Inter-agency Fuel Treatment Decision Support System (IFTDSS) based on the proposed treatments and Fuel Model 10 shows positive changes to fire behavior immediately following treatments similar to the proposed actions in this project. Fuel Model 10, or Mature/Overmature Timber and Understory, describes an excessively stocked forest environment similar to the conditions represented in the project area following the low to moderate severity burns from the 2020 CZU Lightning Complex Fires, high wind events, and regeneration of understory fuels (Anderson, 1982). This project intends to predominately create shaded fuel breaks that could be used to slow a wildfire's rate of spread, providing an increased chance for nearby residents or campers and staff to escape, and to potentially contain a fire. This project would have a positive impact to wildfire after treatments. Based on the implementation of the SPR's and positive outcome of this project, the potential to substantially exacerbate fire risk and expose people to uncontrolled spread of wildfire would be less than significant.						
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	Impact WIL-2, 3-17	LTS	SPR AQ- 3 SPR GEO-3, 4, 5, 8	YesYes	LTSLTS	☒
The initial and maintenance treatments would include mechanical treatments using heavy equipment and manual treatments using mechanized hand tools, which could exacerbate fire risk as discussed above in WIL-1. The potential for post-fire landslides and flooding was evaluated in the PEIR (CalVTP Final PEIR Volume II Section 3.17.3, page 14-15). The potential exposure of people or structures to post-fire landslides and flooding are within the scope of the activities and impacts covered in the PEIR because the equipment types and duration of use are consistent with those analyzed in the PEIR and prescribed fire would not be included as a treatment in this project. SPR GEO-3 through GEO-5 will be implemented to reduce the risk of erosion and mass wasting post-fire, in the event that a wildfire occurred as a result of the proposed treatments or an unrelated occurrence. The proposed mechanical treatments are limited to slopes equal to or less than 40% and equipment access is limited to slopes equal						

to or less than 50% and the average slope of operation throughout the treatment areas ranges from approximately 20-30%, therefore, SPR GEO-8 does not apply to this project impact. This project intends to create fuel reductions that will serve as an opportunity for fire resources to stop or slow the spread of wildfire, which may lead to smaller burn scars, or less area susceptible to post-fire flooding or erosion. Based on the implementation of the applicable SPR's, the potential for this project to result in post-fire flooding or landslides would be less than significant.						
Other Impacts related to Wildfire: Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The proposed treatment is consistent with the treatment types and activities considered in the PEIR. The project proponent has considered all site-specific characteristics and determined they are consistent with the environmental and regulatory setting conditions discussed in the PEIR (CalVTP Final PEIR Volume II 3.17.1 and 3.7.2). No changed circumstances would lead 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.						

EC-17: ADMINISTRATIVE STANDARD PROJECT REQUIREMENTS

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE would meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
This project proposes mechanical and manual treatments that would require the project proponent, CAL FIRE, to discuss all natural and environmental resources that will be protected using SPR's and mitigation measures, identify sensitive resources onsite, and discuss resource protection measures. This project does not propose prescribed burning.			

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.	YesYes	SMRCD PriorPrior	CAL FIRE
This project includes mechanical and manual treatments which will occur in delineated treatment areas, with flagging around sensitive resources, such as Watercourse and Lake Protection Zones, archeological resources, or sensitive biological species. The implementation of this SPR will minimize the risk of an impact to sensitive resources resulting from operations.			
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent would design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
This SPR will be implemented to reduce the risk of inconsistencies with local plans, policies, and ordinances. This project is consistent with the San Mateo County Local Coastal Program (LCP) Policy 9.18 – Regulation of Development on 30% or Steeper Slopes, which indicates that development that does not constitute a building, road or driveway, or require grading shall be exempt from this provision that prohibits development on slopes greater than or equal to 30%. This project does not involve the development of any structures or buildings, roads or driveways, or grading. This project is considered a forest health fuels reduction project that will include the treatment of understory vegetation and small diameter trees that will be chipped and spread as mulch and will root systems intact to support regenerative sprouting and decrease the potential for erosion in treated areas. Operations will not occur on unstable soils.			
SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent would: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types.	NoNo	N/AN/A	
This project does not include prescribed burning, therefore, this SPR does not apply.			

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.	YesYes	SMRCD DuringDuring	CAL FIRE
Contractor compliance with this SPR will maintain the natural landscape within the project area and minimize impacts to wildlife as a result of human generated trash.			
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent would post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	YesYes	SMRCD Prior-DuringPrior-During	CAL FIRE
The project will occur on a private property that is utilized by campers and staff seasonally for recreational purposes. Notifications shall be located in a location visible by campers, staff, and local residents that may be impacted by traffic along Canyon Road.			
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. This SPR applies to all treatment activities and all treatment types.	YesYes	SMRCD Prior-During-PostPrior-During-Post	CAL FIRE
The project proponent will comply with this SPR.			
SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE would include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period would be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types.	YesYes	CAL FIRE PriorPrior	CAL FIRE
This project is located on private property owned by the Girls Scouts of Northern California; requests to access the property for post-treatment assessments should be directed to the Girl Scouts of Northern California.			

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 would contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. This SPR applies to all treatment activities and all treatment types.	YesYes	SMRCD PriorPrior	CAL FIRE
The project area is located within the Coastal Zone, therefore, this SPR applies to this project. Efforts have been made between the CCC, San Mateo Resource Conservation District (SMRCD) and other similar entities to develop a Public Works Plan (PWP) document that establishes a set of standards for CalVTP projects occurring within the coastal zone within San Mateo and Santa Cruz Counties that allows further treatments than presented in SPR BIO-8. The DRAFT Camp Butano Creek PSA was sent to the CCC on April 23, 2021 for review. A Coastal Vegetation Treatment Standards (CVTS) document has been filled out for this project and was submitted to the CCC on April 23, 2021 for review with the PSA (Attachment G). All of the Coastal Zone has been identified as ESHA in San Mateo County by the CCC. The basis of this project is to conduct ecologically restorative treatments that promote the persistence and resiliency of the redwood forest type as an environmentally sensitive habitat area through a myriad of protection, conservation, and avoidance measures.			

EC-18: MANDATORY FINDINGS OF SIGNIFICANCE

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

Discussion

No additional comments.

Additional information:

☒ List of Standard Project Requirements (SPRs) and Mitigations Measures (MMs). (See Attachment A)

☒ Vicinity map on a USGS quad map (SPR AD-2)

- ☐ Aerial imagery of subsequent activity area (see location maps)
- ☐ Subsequent activity location on Treatable Landscape & Ecoregions Map
- ☐ Parcel map with APN's covering all ownerships within subsequent activity area
- ☐ Soil survey map of subsequent activity area

☐ Smoke Management Plan/Burn Plan (SPR AQ-2 & 3)

- ☐ Public Notice for Prescribed Burning
- ☐ Model run of FOFEM, BEHAVE, or other appropriate fire behavior modeling simulation
- ☐ Burn Unit Maps – Ortho and Topographic

☐ Air District Asbestos Dust Control Plan (SPR AQ-5)

☐ Incident Action Plan (IAP) (SPR AQ-6)

☒ Archaeological reviews/surveys (Confidential addendum) (EC-4)

☒ Biological review/surveys (EC-5)

- ☒ CNDDB Records Search
- ☒ Biologist Consultation/Notification
- ☐ Water Quality consultation
- ☐ Consult Attachment C (and Cal VTP Appendix BIO-3)

☐ Biological Compensation Plan (MM BIO-1c, 2c, 2d, 2e, 2f, 3b, 3c,)

☐ Geological Review (MM GHG-2)

☐ Spill Prevention & Response Plan (SPR HAZ-5)

☐ Traffic Management Plan (SPR TRAN-1)

☐ Organic waste Disposal Plan (SPR UTIL-1)

☒ Air Quality and GHG Emissions Estimates (SPR GHG-1)

- ☐ Air Quality consultations

☒ Off-Site Noise-Sensitive Receptors Notification (SPR NOI-6)

- ☐ Other _____

DELIVERABLES POST APPROVAL

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

Attachment A

Standard Project Requirements (SPRs) and Mitigation Measures (MMs)

EC-1: Aesthetics 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.
- **SPR AES-2 Avoid Staging within Viewsheds:** The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR AES-3 Provide Vegetation Screening:** The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

EC-2: Agriculture and Forest Resources

- **NONE**

EC-3: 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 only to prescribed burning treatment activities and all treatment types, including treatment 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.

- **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.
- **MM AQ-1 Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques:** Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible.

  Techniques for reducing emissions may include, but are not limited to, the following:
  - Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each 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 NOX and PM.

EC-4: 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.
- **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.
- **SPR CUL-3 Pre-field Research:** The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being 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.
- **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.

- **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.
- **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.
- **SPR CUL-7 Avoid Built Historical Resources:** If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR CUL-8 Cultural Resource Training:** The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **MM 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 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.

EC-5 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 for each treatment project, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the Biological Resources Discussion in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:
    - **1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.** If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:
        - by physically avoiding the suitable habitat, or

- 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.

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

- **SPR BIO-2 Require Biological Resource Training for Workers:** The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR BIO-3 Survey Sensitive Natural Communities and Other Sensitive Habitats:** If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:
    - require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of A Manual of California Vegetation (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website).
    - map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.

  This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR BIO-4 Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function:** Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:
    - Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys

conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.

- Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.
- Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.
- Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.
- The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.
- In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site specific basis if the qualified

RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.

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

- **SPR BIO-6 Prevent Spread of Plant Pathogens:** When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker *(Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):
    - clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk;
    - include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training;
    - minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment;
    - minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;
    - clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and
    - follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytopthoras* in Native Habitats 2016).

  This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR BIO-8 Identify and 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.

- **SPR BIO-9 Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife:** The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):
  - clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;
  - for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
  - inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;
  - stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
  - identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;
  - treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and
  - implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version).

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

If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).

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

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

Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can

occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

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

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

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

- **MM BIO-2a Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species:** 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, 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.
- **MM BIO-2b Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species:** 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:
  Avoid Mortality, Injury, or Disturbance of Individuals
    - The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:
      For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause

mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer 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.

Maintain Habitat Function

- 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 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.

EC-6: Geology, Soils, Paleontology, and Mineral Resources

- **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.
- **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.

- **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, or 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.
- **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.
- **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.
- **SPR GEO-7 Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads:** To minimize erosion, the project proponent will:
    - 1. Prohibit use of heavy equipment where any of the following conditions are present:
        - Slopes steeper than 65 percent.
        - Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.
        - 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:

        - Existing tractor roads that do not require reconstruction, or
        - New tractor roads flagged by the project proponent prior to the treatment activity.
    - 3. Prescribed herbivory treatments will not be used in areas with over 50 percent slope.

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

EC-7: 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, including treatment maintenance.

EC-8: Energy Resources

- **NONE**

EC-9: Hazardous Materials, 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.
- **SPR HAZ-2 Require Spark Arrestors:** The project proponent will require mechanized hand tools to have federal or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- **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.
- **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.
- **MM 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 or known contamination is located on a project site, the project may proceed as planned.

EC-10: 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 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.
- **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.
- **SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:** The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

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

- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.
- WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.
- Burn piles will be located outside of WLPZs.
- No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.
- Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.

  Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.

  Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.
- Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.

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

- **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.

EC-11: Land Use and Planning, Population and Housing

- **NONE**

EC-12: 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.

- **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 treatment activities and all treatment types, including treatment maintenance.
- **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.
- **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.
- **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.
- **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.

EC-13: 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 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 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.

EC-14: 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.

  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.

EC-15: Public Services, utilities, and Service Systems Standard Project Requirements

- **NONE APPLY**

EC-16: Wildfire

- **NONE**

EC-17: 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,
- **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.

- **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.
- **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.
- **SPR AD-6 Public Notification 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.
- **SPR AD-7 Provide Information on Proposed, Approved, and Completed 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 at least 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 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.
- **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:
  - 1. 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
  - 2. 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.

Attachment B

Project Maps

List of Maps

Map 1: Project Overview

Map 2: Project Vicinity

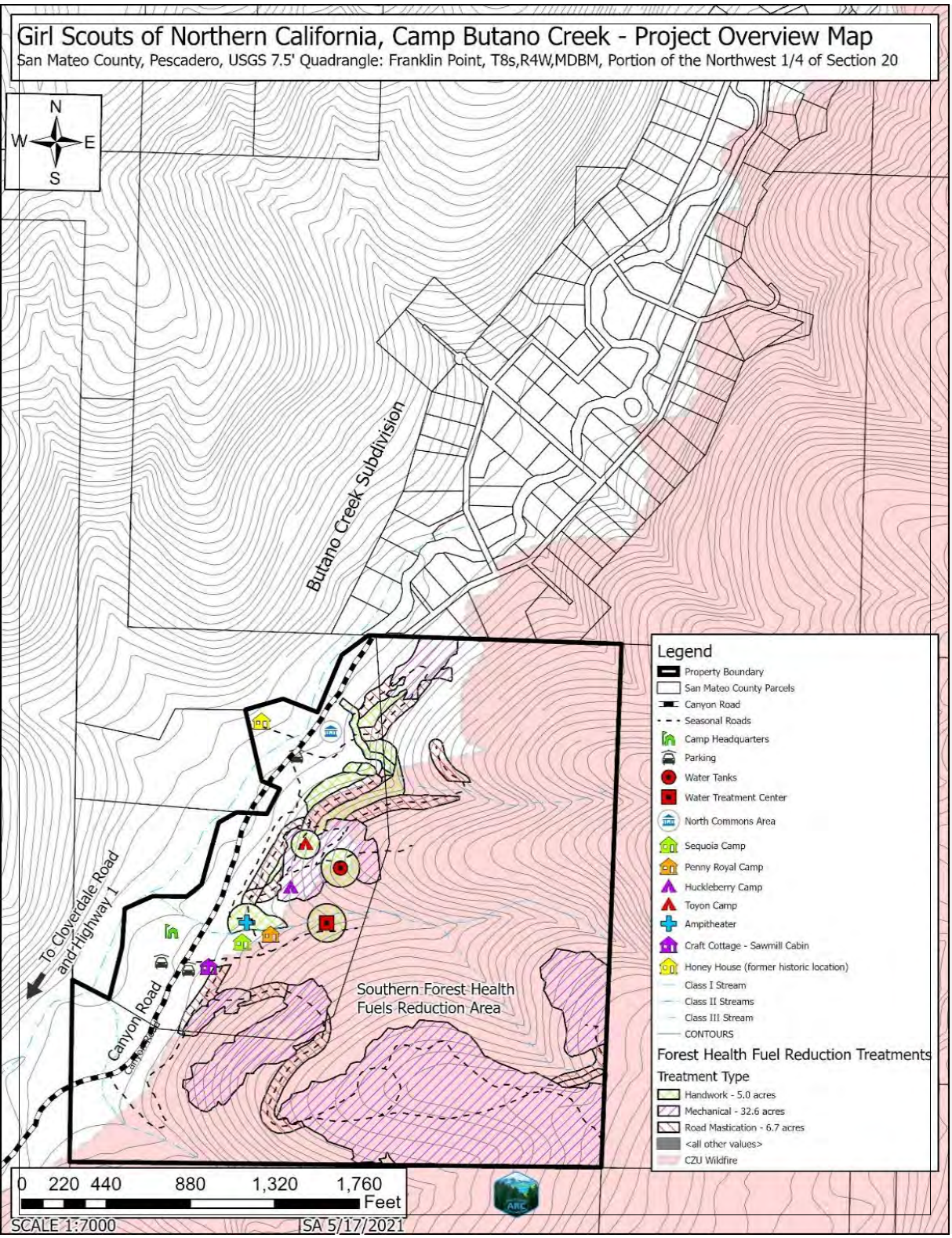
Map 3: Project Treatment Areas

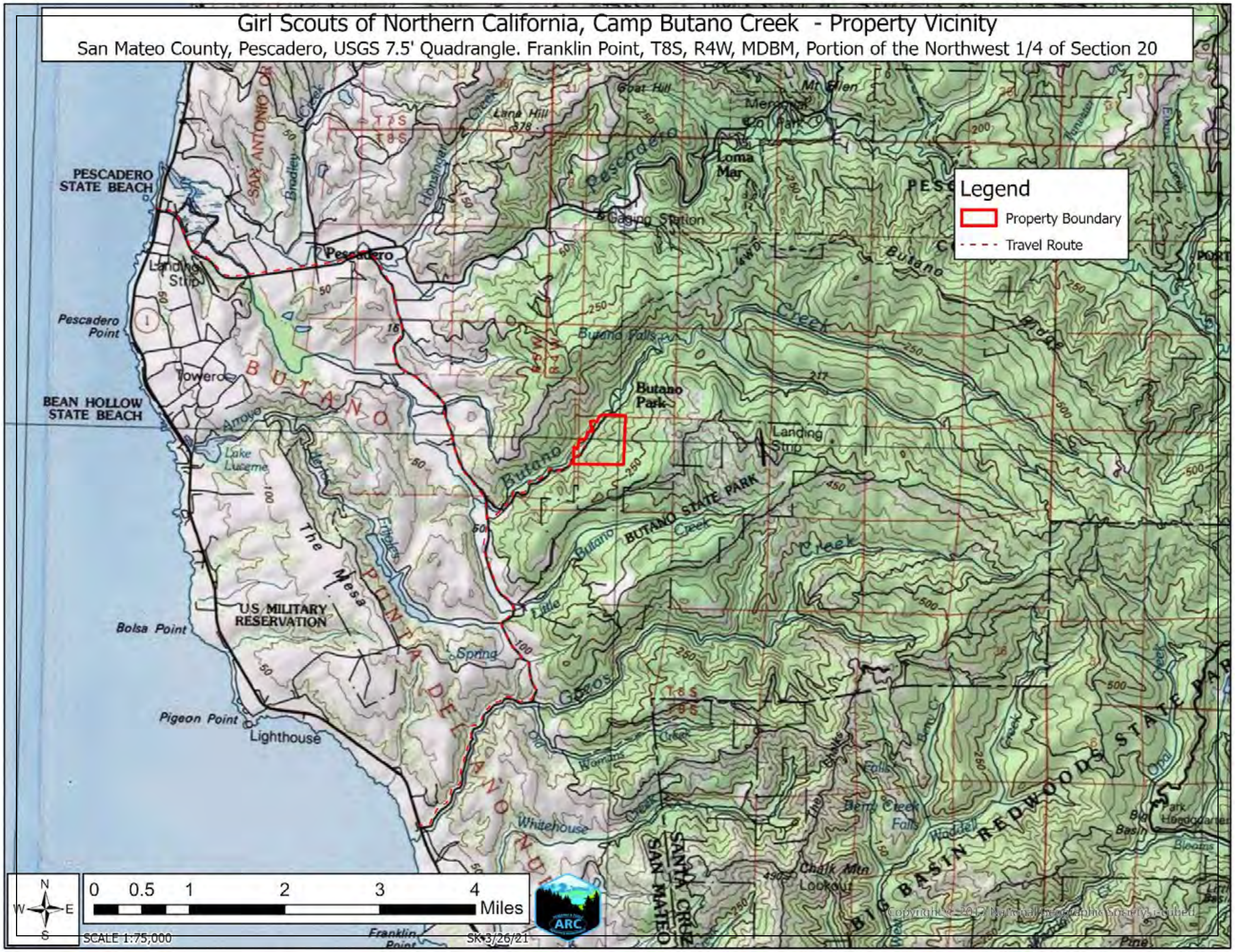
Map 4: Property Vegetation Types

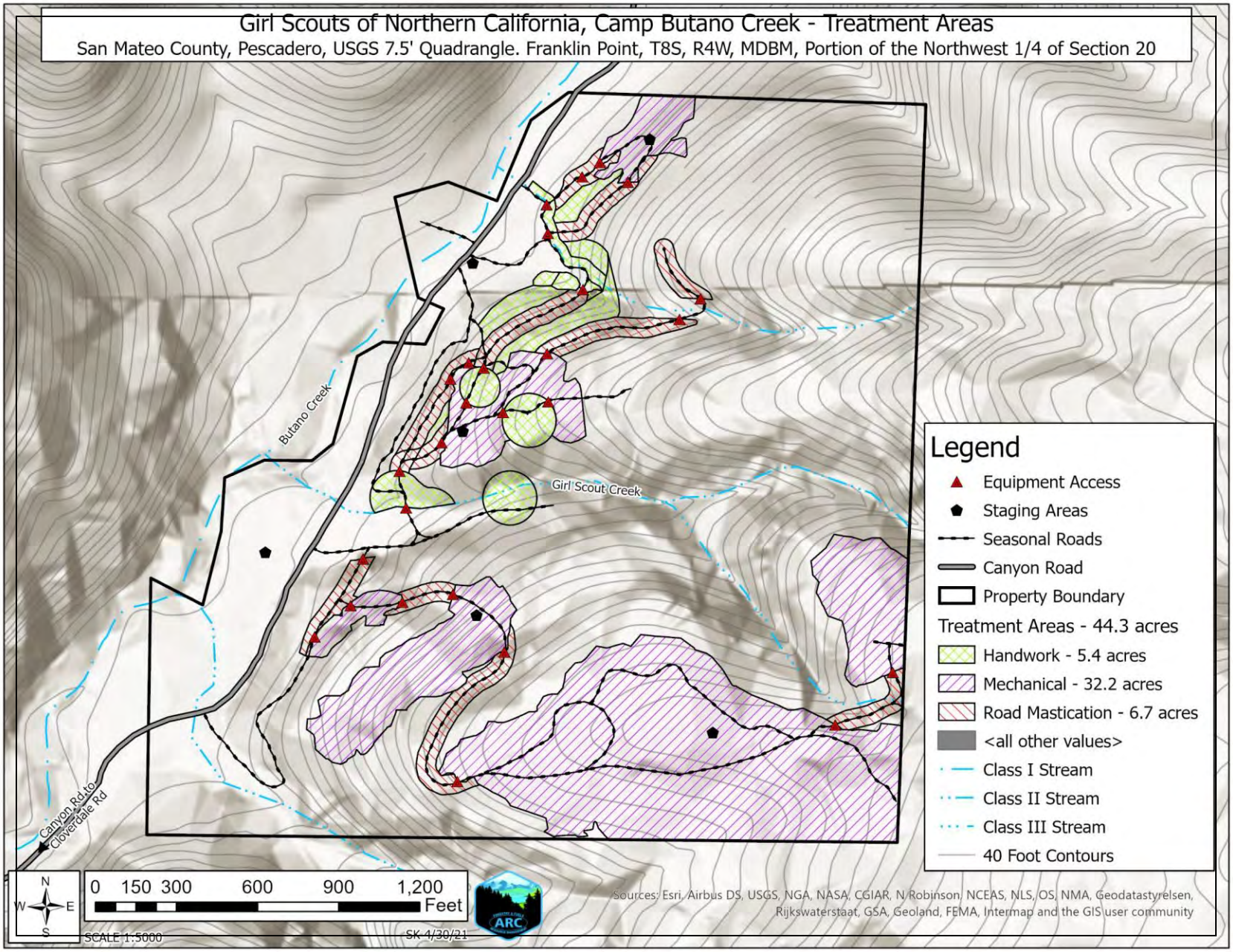
Map 5: Treatment Area Vegetation Type

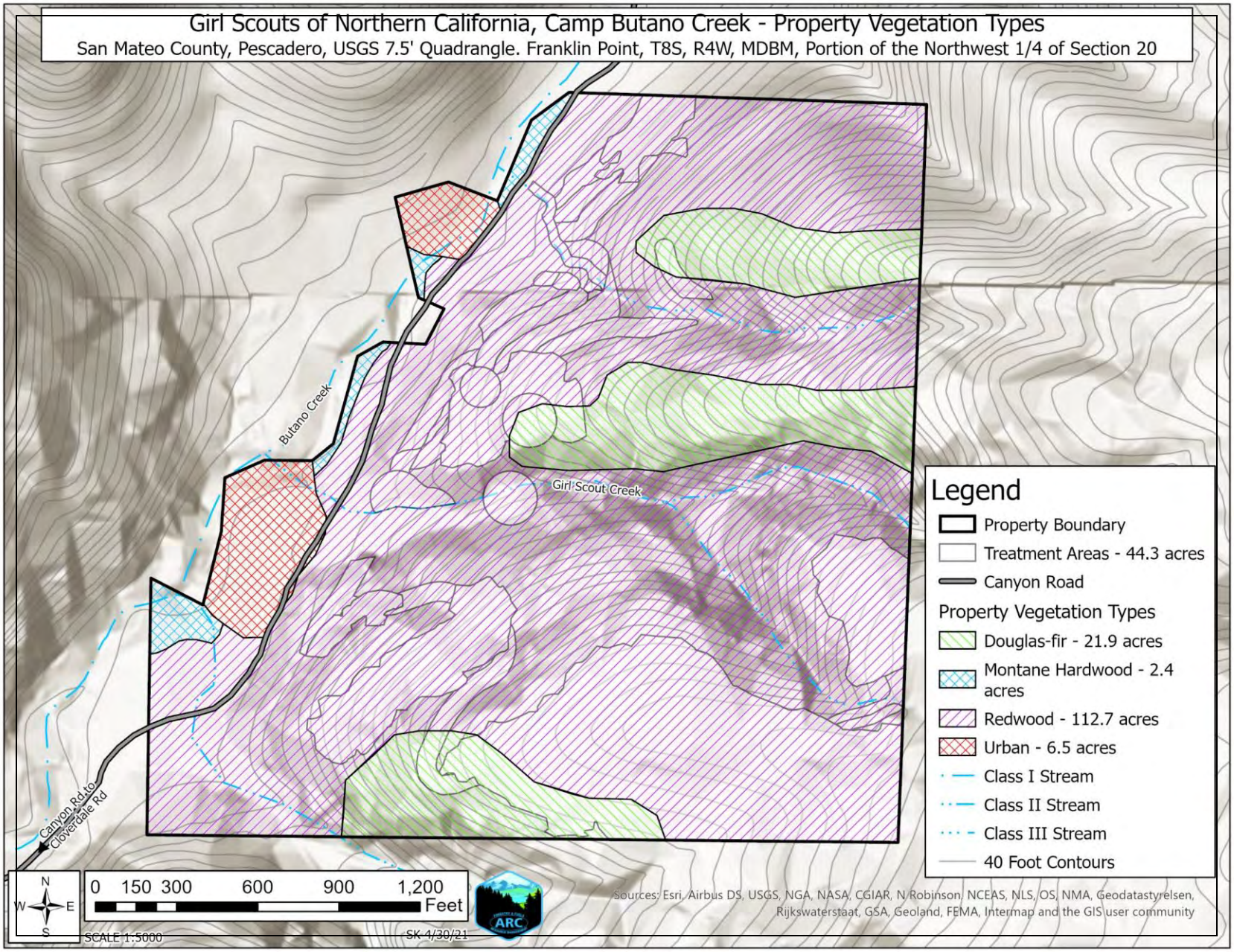
Map 6: Sensitive Natural Communities and Habitats

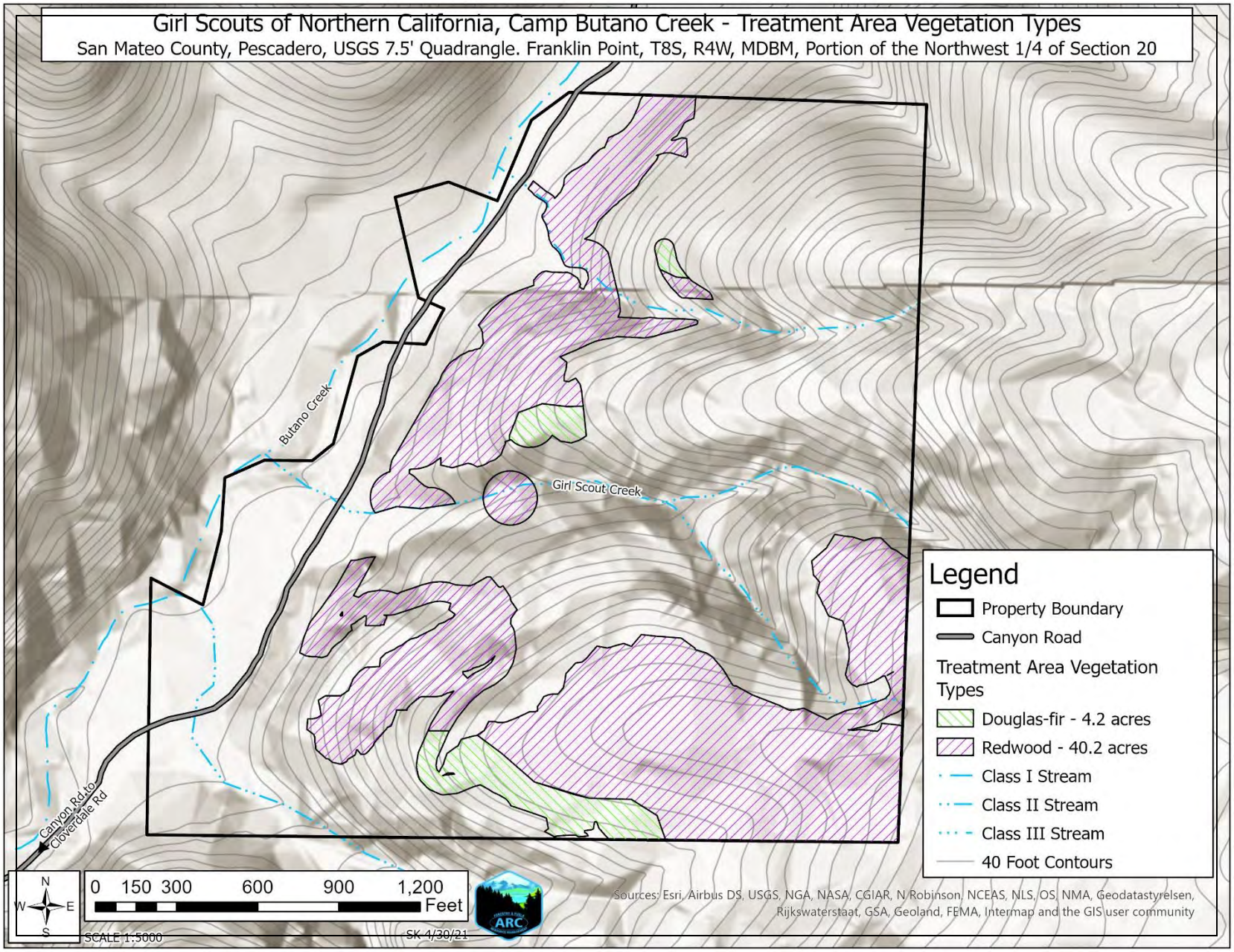
Map 7: CNNDB Map

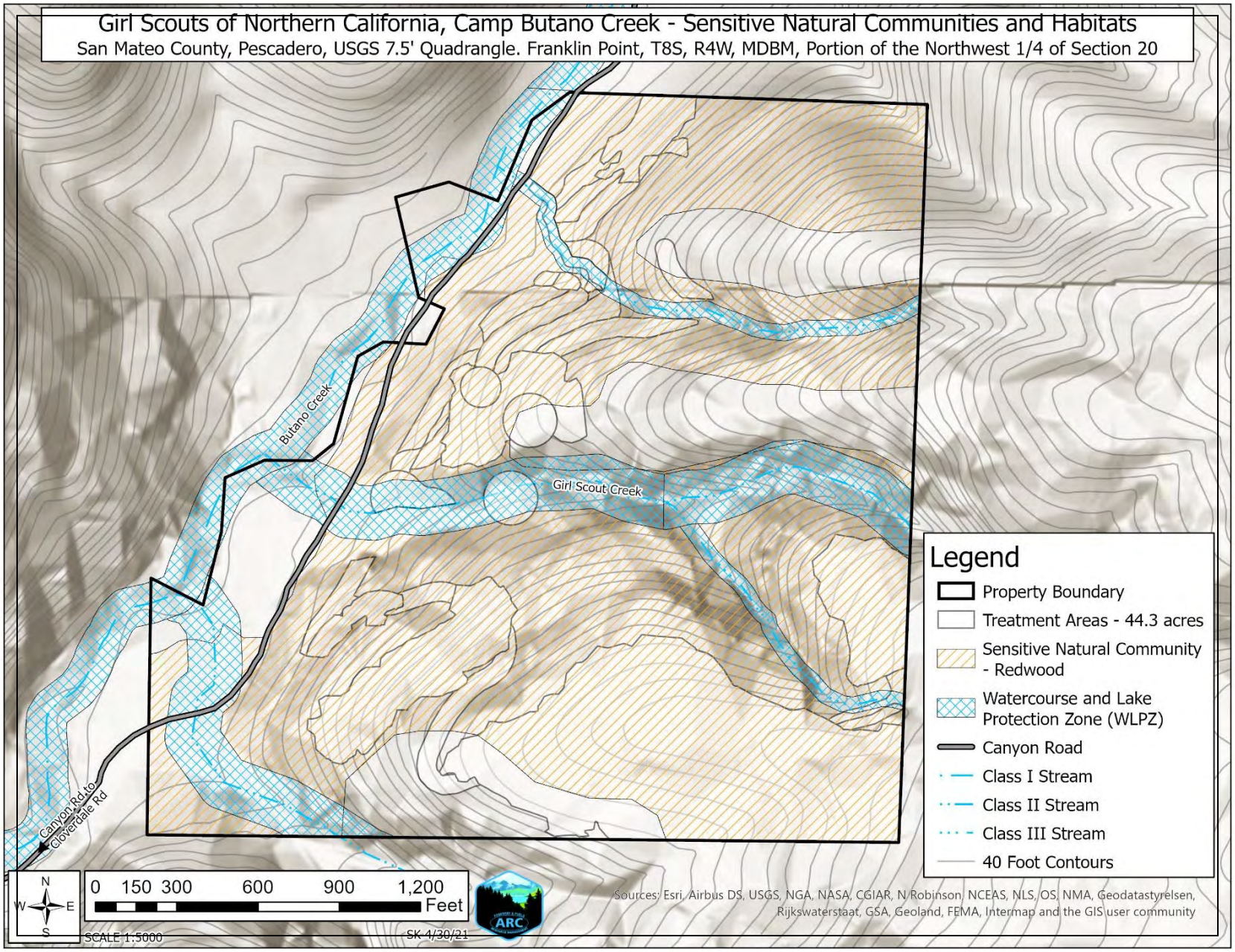

Girl Scouts of Northern California, Camp Butano Creek - Project Overview Map
San Mateo County, Pescadero, USGS 7.5' Quadrangle: Franklin Point, T8s,R4W,MDBM, Portion of the Northwest 1/4 of Section 20
N
W
E
S
Butano Creek Subdivision
To Cloverdale Road and Highway 1
Canyon Road
Southern Forest Health Fuels Reduction Area
Legend
Property Boundary
San Mateo County Parcels
Canyon Road
Seasonal Roads
Camp Headquarters
Parking
Water Tanks
Water Treatment Center
North Commons Area
Sequoia Camp
Penny Royal Camp
Huckleberry Camp
Toyon Camp
Ampitheater
Craft Cottage - Sawmill Cabin
Honey House (former historic location)
Class I Stream
Class II Streams
Class III Stream
CONTOURS
Forest Health Fuel Reduction Treatments
Treatment Type
Handwork - 5.0 acres
Mechanical - 32.6 acres
Road Mastication - 6.7 acres
<all other values>
CZU Wildfire
0 220 440 880 1,320 1,760
Feet
SCALE 1:7000
SA 5/17/2021


Girl Scouts of Northern California, Camp Butano Creek - Property Vicinity
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Legend
Property Boundary
Travel Route
PESCADERO STATE BEACH
Pescadero Point
BEAN HOLLOW STATE BEACH
Lake Lucerne
U.S. MILITARY RESERVATION
Bolsa Point
Pigeon Point
Lighthouse
Pescadero
Loma Mar
Gaging Station
Butano Falls
Butano Park
Landing Strip
BUTANO STATE PARK
Butano Creek
Chalk Mtn Lookout
BIG BASIN REDWOODS STATE PARK
SAN MATEO
SANTA CRUZ
N
S
E
W
0 0.5 1 2 3 4
Miles
SCALE 1:75,000
SK 3/26/21


Girl Scouts of Northern California, Camp Butano Creek - Treatment Areas
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Butano Creek
Girl Scout Creek
Canyon Rd to Cloverdale Rd
Legend
Equipment Access
Staging Areas
Seasonal Roads
Canyon Road
Property Boundary
Treatment Areas - 44.3 acres
Handwork - 5.4 acres
Mechanical - 32.2 acres
Road Mastication - 6.7 acres
<all other values>
Class I Stream
Class II Stream
Class III Stream
40 Foot Contours
N
W
E
S
0 150 300 600 900 1,200
Feet
SCALE 1:5000
SK 4/30/21
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

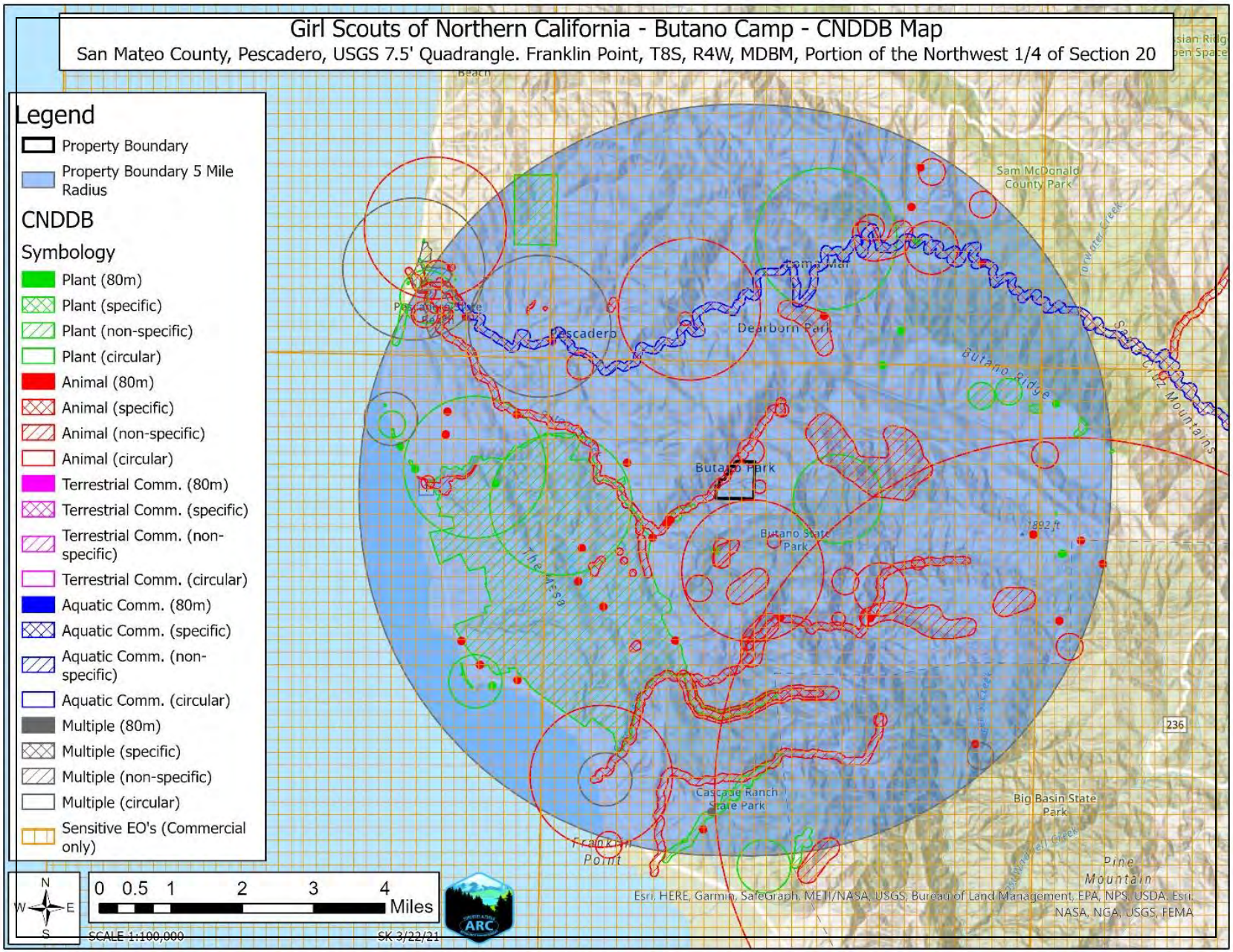

Girl Scouts of Northern California, Camp Butano Creek - Property Vegetation Types
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Butano Creek
Girl Scout Creek
Canyon Rd to Cloverdale Rd
Legend
Property Boundary
Treatment Areas - 44.3 acres
Canyon Road
Property Vegetation Types
Douglas-fir - 21.9 acres
Montane Hardwood - 2.4 acres
Redwood - 112.7 acres
Urban - 6.5 acres
Class I Stream
Class II Stream
Class III Stream
40 Foot Contours
N
W
E
S
0 150 300 600 900 1,200
Feet
SCALE 1:5000
SK 4/30/21
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community


Girl Scouts of Northern California, Camp Butano Creek - Treatment Area Vegetation Types
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Butano Creek
Girl Scout Creek
Canyon Rd to Cloverdale Rd
Legend
Property Boundary
Canyon Road
Treatment Area Vegetation Types
Douglas-fir - 4.2 acres
Redwood - 40.2 acres
Class I Stream
Class II Stream
Class III Stream
40 Foot Contours
N
W
E
S
0 150 300 600 900 1,200
Feet
SCALE 1:5000
SK 4/30/21
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community


Girl Scouts of Northern California, Camp Butano Creek - Sensitive Natural Communities and Habitats
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Butano Creek
Girl Scout Creek
Canyon Rd to Cloverdale Rd
Legend
Property Boundary
Treatment Areas - 44.3 acres
Sensitive Natural Community - Redwood
Watercourse and Lake Protection Zone (WLPZ)
Canyon Road
Class I Stream
Class II Stream
Class III Stream
40 Foot Contours
N
W
E
S
0 150 300 600 900 1,200
Feet
SCALE 1:5000
SK 4/30/21
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Girl Scouts of Northern California - Butano Camp - CNDDB Map

San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20



Attachment C

Example Letter to Geographically Affiliated Tribes

(Please see the following pages)

Shelby Kranich, Assistant Forester II
Auten Resource Consulting
116 Martinelli Street, Suite #8, Watsonville, CA 95076
(831)247-1062
Shelby.Kranich.ARC@gmail.com

Cultural Resources Representative
Name of Tribal Government or Individual
Mailing Address provided on the most current CAL FIRE Native American Contact List

May 4, 2021

RE: Girl Scouts of Northern California, Camp Butano Creek CalVTP

Dear Cultural Resources Representative:

A proposed CAL FIRE project is being planned in San Mateo County in the area shown on the enclosed maps. This project will include mechanical mastication and manual treatments to treat understory vegetation, dead or downed material, hazard trees, dead, dying, and diseased trees, and live trees up to 8 inches diameter at breast height (DBH) over approximately 44 acres of forestland. The project treatment areas are predominately located in proximity to critical camp infrastructure and areas of declined forest health resulting from sudden oak death, invasive species, and the CZU Lightning Complex. Mechanical treatment areas are predominately located along ridges on slopes less than 40% with a component of reducing vegetative fuels along existing road infrastructure, where equipment will be limited to operating on existing road infrastructure and reaching out to approximately 30 feet to treat vegetation. As part of the archaeological review for this project we respectfully request any information that you wish to share about cultural resources that exist near or within the project area. This notification provides you the opportunity to disclose the existence of Native American archaeological or cultural sites that could potentially be affected by the project and the opportunity to submit other comments regarding the project.

The project is located on the Girl Scouts of Northern California Camp Butano Creek property, approximately 5.25 air miles southeast of Pescadero State Beach. The legal description of the is USGS 7.5' Quadrangle: Franklin Point, California: T8S, R4W, Portions of Section 20, Mount Diablo Base and Meridian. Two maps are enclosed to provide the precise location of the project properties. The first map is a general vicinity map that displays a travel route from the Highway 1 near Pescadero State Beach and Highway 1 near Gazos Creek to the project property. The second map provides a more detailed project location, including the property boundary and treatment areas, on a USGS 7.5' topographic quadrangle.

Please contact me if you wish to share information about archaeological or cultural sites in the project area. Locations of sites you disclose will be kept confidential. Disclosure to CAL FIRE, however, is an important step that betters our ability to identify and protect sites. A confidential archaeological survey report will soon be prepared under the direction of CAL FIRE Associate State Archaeologist, Ben Harris. Feel free to contact our archaeologist at his mobile number (707)529-7989, or office number (707)576-2966, if you are more comfortable disclosing information to him.

If you have any questions or comments, please contact me at the telephone, mail, or email address listed above. The review process and comment period will end approximately 30 days from the date of this letter.

If during the field survey of this project, a Native American archaeological or cultural site is identified within the project area, you will receive a second written notification from me that includes both site description and protection information. This second notification will describe the proposed measures taken to protect the site during project operations and provide you with the opportunity to submit comments to CAL FIRE concerning the adequacy of those protection measures.

Please feel free to contact me if you have any questions concerning this proposed project or what is being requested in this letter.

Sincerely,

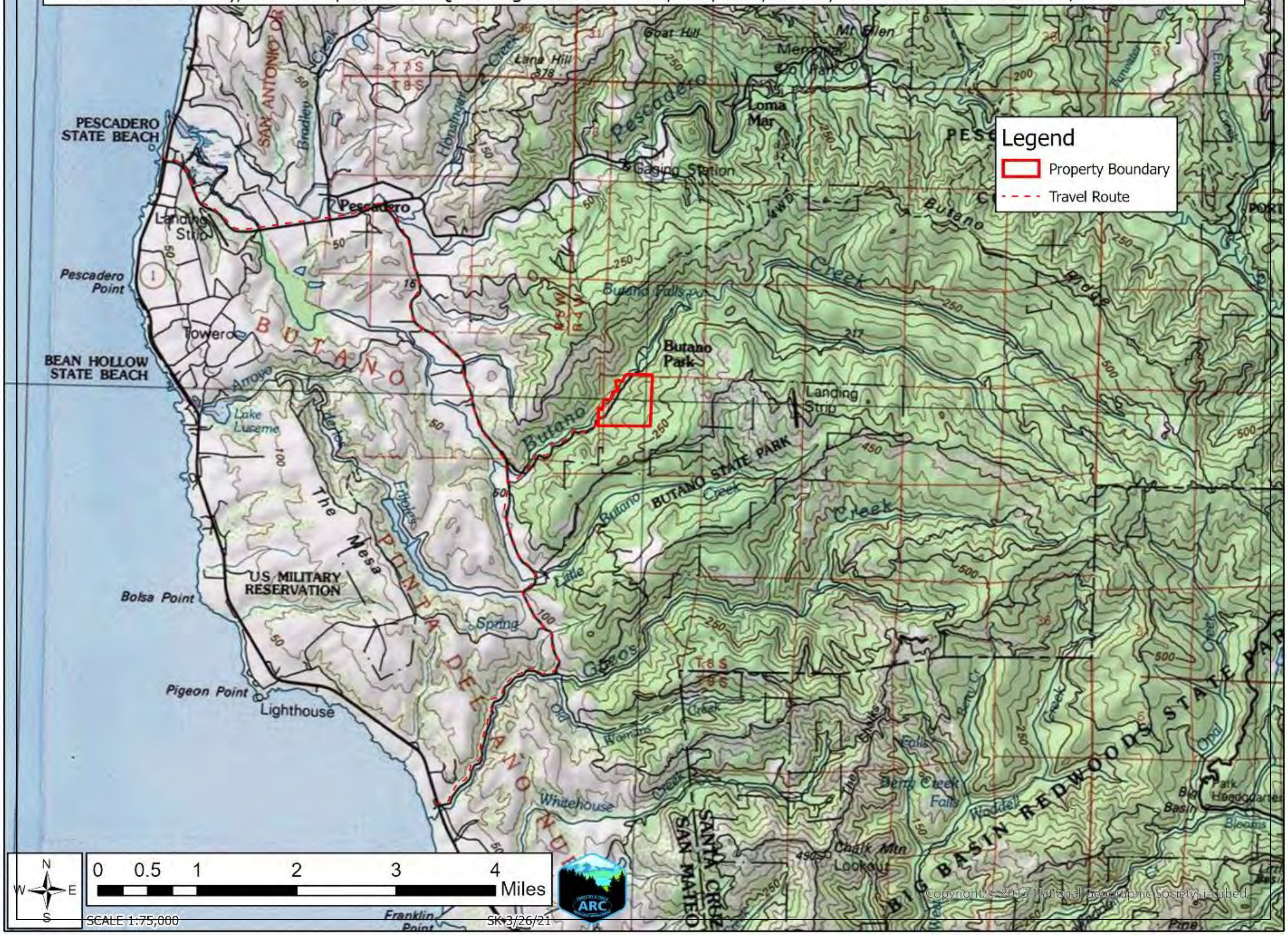
Shelby Kranich

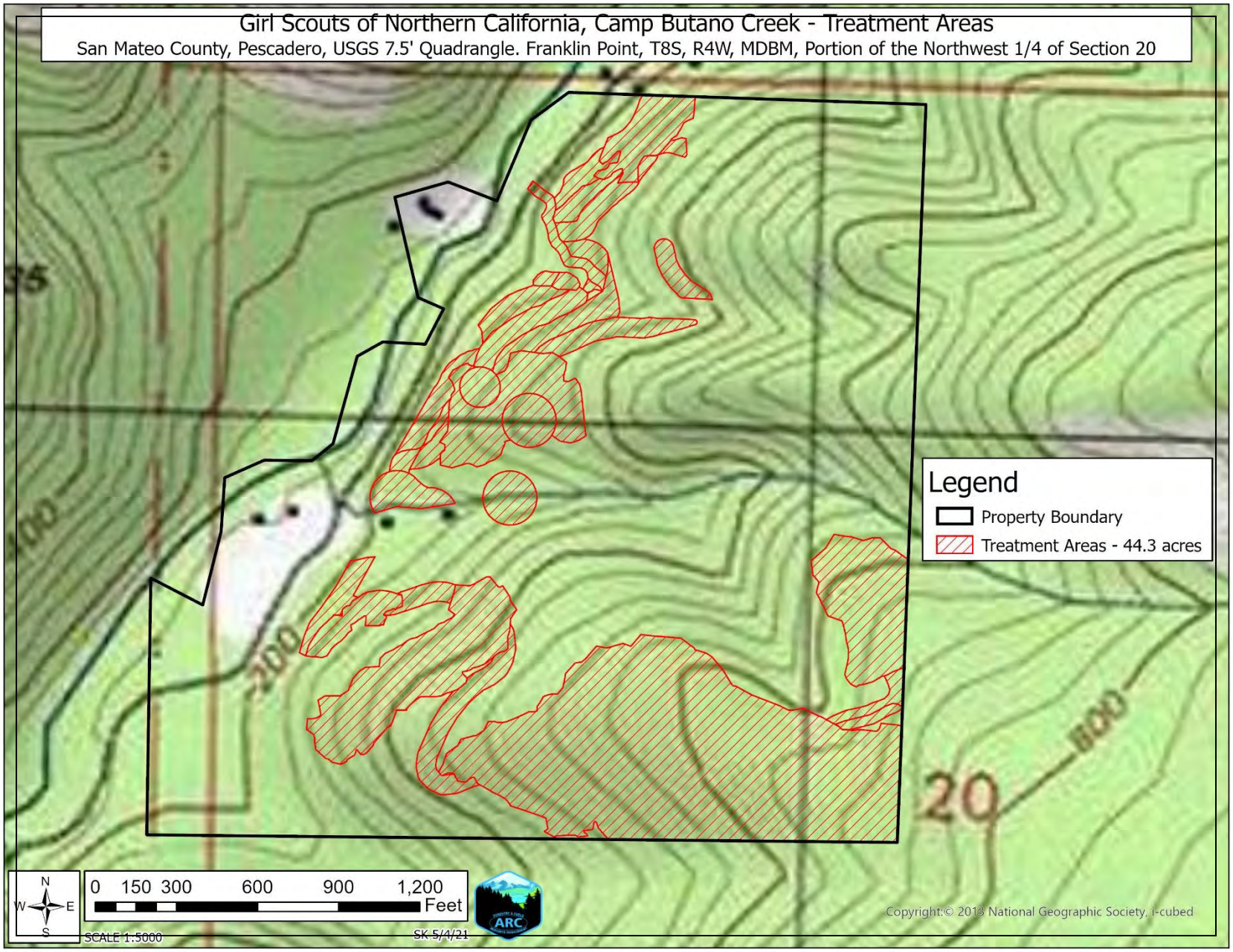
Shelby Kranich

Enclosures: Project Vicinity Map and Project Location Map

Girl Scouts of Northern California, Camp Butano Creek - Property Vicinity

San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20




Girl Scouts of Northern California, Camp Butano Creek - Treatment Areas
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Legend
Property Boundary
Treatment Areas - 44.3 acres
N
W
E
S
0 150 300 600 900 1,200
Feet
SCALE 1:5000
SK 5/4/21
ARC
Copyright:© 2013 National Geographic Society, i-cubed
20
800
200

Attachment D

Biological Resources Species List and Analysis

The California Natural Diversity Data Base (CNDDB), BIOS 5, was used to identify the state and federally listed species that may be present within the treatment areas. The search yielded 37 federal and state threatened, endangered, or candidate species, CDFW species of special concern and candidate species, and the California Native Plant Society's (CNPS) California Rare Plant Rank (CRPR) List 1 and 2, please see the *Discussion on All Species* section below.

A pre-treatment biological survey was completed on May 10, 2021~~is forthcoming,~~ and did not identified any ~~however, there are currently no~~ special-status plants ~~that have been identified~~ within the project property~~ies~~ or within the treatment areas ~~prior to the survey~~. Two special-status plants, including Anderson's manzanita (*Arctostaphylos andersonii*) and Santa Cruz microseris (*Stebbinsoseris decipiens*) have potentially suitable habitat located within treatment areas or the project properties, but are not known to occupy the project properties (Table 1).

A pre-treatment site visit with CDFW~~biological survey is forthcoming~~ did not identify any~~, however, there are currently no~~ special-status wildlife ~~that have been identified~~ within the project property ~~ies~~ or within the treatment areas. ~~areas prior to the survey.~~ Nine special-status wildlife species have potentially suitable habitat within the project properties or treatment area include the Santa Cruz black salamander (*Aneides niger*), pallid bat (*Antrozous pallidus*), marbled murrelet (*Brachyramphus marmoratur*), Townsend's big eared bat (*Corynohinus townsendii*), California giant salamander (*Dicamptodon ensatus*), western pond turtle (*Emys marmoratum*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), mountain lion (*Puma concolor*), and California red-legged frog (*Rana draytonii*) (Table 1).

Table 1: Special-Status Plant and Wildlife Species with Potential to Occur within the Property Boundary

Species	Listing Status			Habitat	Potential for Occurrence
	Federal	State	CRPR		
Special-Status Plants					
Arctostaphylos andersonii (Anderson's manzanita)	--	--	1B.2	This species grows in openings in redwood forests or near forest edges, usually below 700 meters elevation. Anderson's manzanita favors hot areas in broadleaved upland forests, chaparral communities, and North coast coniferous forests.	May occur. The property may contain potentially suitable habitat for this species.
Stebbinsoseris decipiens (Santa Cruz microseris)	--	--	1B.2	This species favors open, serpentinite areas within northern coastal scrub, closed-cone pine forest, mixed evergreen forest, chaparral, and coastal prairie communities below 500 meters elevation.	May occur. The property may contain potentially suitable habitat for this species.
Special-Status Wildlife					
Aneides niger (Santa Cruz black salamander)	--	SSC	--	This species occurs in mixed deciduous woodland, coniferous forests, and coastal grasslands in California. This species can be found in riparian areas near	May occur. The property may contain potentially suitable habitat for this species.

				streams and under damp debris, but do not inhabit streams.	
Antrozous pallidus (pallid bat)	--	SSC	--	This species favors rocky outcrops in semi-arid climates within grasslands, chaparral, oak woodlands, and coniferous forests. The pallid bat diet consists of ground-dwelling prey like small mammals or reptiles and large flying or ground-dwelling insects	May occur. The treatment areas and property boundaries contain potentially suitable within coniferous forest habitat for this species.
Brachyramphus marmoratur (marbled murrelet)	TH	E	--	This species favors nesting sites in old-growth coniferous forests or rocky talus slopes near the Pacific Ocean, up to approximately 15 miles inland. The marbled murrelet nests on large branches approximately 4 inches in diameter or larger that create a platform that may be screened from predators or wind by branches of nearby trees, where the female will lay one yellow, olive, or blue-green egg with brown, black, and lavender specks. This seabird forages in coastal marine habitats, dieting on primarily fish and crustaceans.	May occur. The treatment areas and property boundaries contain potentially suitable coniferous forest habitat for this species.
Corynohinus townsendii (Townsend's big eared bat)	--	SSC	--	This species favors dense coniferous forests, native prairies, and coastal communities usually below 3,300 meters elevation. This bat prefers dark, open caves or cliffs in cold areas for roosting and does not roost in rock crevices.	May occur. The property may contain potentially suitable habitat for this species.
Dicamptodon ensatus (California giant salamander)	--	SSC	--	The California giant salamander requires habitat with cover for hiding, sun protection, and breeding and can be found under rocks, logs, or stones. This species' aquatic habitat consists of lakes, ponds, rivers, streams, or fast-moving water.	May occur. The treatment areas and property boundaries contain potentially suitable stream habitat with coverage for this species.
Emys marmorata (western pond turtle)	--	SSC	--	The habitat for this species consists of aquatic and terrestrial environments, including lakes rivers, streams, ponds, wetlands, vernal pools, creeks, reservoirs, agricultural ditches, estuaries, and brackish waters. Adults favor deep waters while juveniles favor shallow waters, however, both prefer slow moving water. Terrestrial habitats consist of burrows in leaves or soil during the winter season. Nests are built	May occur. The treatment areas and property boundaries contain potentially suitable stream and terrestrial habitat for this species.

				away from water in flat areas with short vegetation and dry soils.	
Neotoma fuscipes annectens (San Francisco ducky-footed woodrat)	--	SSC	--	This species prefers moderate canopy coverage in oak woodland, chaparral or shrubland, and coniferous forest communities.	May occur. The treatment areas and property boundaries contain potentially suitable coniferous forest habitat for this species.
Puma concolor (mountain lion)	--	CE	--	This species prefers dense vegetative areas within mountain ranges of coniferous forests, scrub and oak woodlands, and arid communities.	May occur. The treatment areas and property boundaries contain potentially suitable coniferous forest habitat for this species.
Rana draytonii (California red-legged frog)	E	SSC	--	Common habitat consists of locations near ponds or along streams in humid forests, grasslands, and coastal scrub communities that contain plant cover. This species breeds in permanent water sources and requires moist refuges, like animal burrows, for cover in the dry season.	May occur. The property may contain potentially suitable stream habitat for this species.

CE – Candidate Endangered

E – Endangered

SSC – CDFW Species of Special Concern

WL – Watch List

California Rare Plant Rank (CRPR)

1B - Plant species rare or endangered in California and elsewhere (Not protected under ESA or CESA)
0.1 - Seriously threatened in California (over 80% of occurrences are threatened; high degree and immediacy of threat)

0.2 - Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)

Discussion on All Species

BOTANICAL SPECIES:

Blasedale's bentgrass (*Agrostis blasdalei*)

Description/ Status:

Agrostis blasdalei, or Blasedale's bentgrass, is a perennial grass-like herb endemic to California and listed as a 1B.2 species under the CRPR. This species grows in tufts that reach up to approximately 1 foot tall and has small, rigid, inrolled leaves. The inflorescence is a thin cylindrical array of spikelets that are brown to tan in coloration.

Habitat:

This species favors full sun coastal dunes within coastal strand, northern coastal scrub, and coastal prairie communities.

Proximity/ Potential for Occurrence:

This species is known to occur in several locations within 5 miles west of the property boundary along Highway 1 near Bean Hallow State Beach and Pigeon Point. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to Blasedale's bentgrass.

Anderson's manzanita (*Arctostaphylos andersonii*)

Description/ Status:

Arctostaphylos andersonii, or Anderson's manzanita, is a shrub species endemic to the Santa Cruz Mountains of California listed as a 1B.2 species under the CRPR. This species is tree-like and can reach 2-5 m in height, is covered with bristles, and has pink, urn-shaped flowers that bloom in early to late spring. The bark is smooth and dark brown-red in coloration with alternate, oblong, heart-shaped leaves.

Habitat:

This species grows in openings in redwood forests or near forest edges, usually below 700 meters (2300 feet) elevation. The Anderson manzanita favors hot areas in broadleaved upland forests, chaparral communities, and North coast coniferous forests.

Proximity/ Potential for Occurrence:

This species is known to occur in two location within 5 miles east of the property boundary within Butano State Park and near Butano Ridge. The treatment areas may contain potentially suitable habitat for this species.

Potential for Impact:

Due to the treatment areas containing or being within proximity to potentially suitable habitat, a survey will be conducted during the peak bloom period a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to Anderson's manzanita.

coastal marsh milk-vetch (*Astragalus pycnostachyus var. pycnostachyus)*

Description/Status:

Astragalus pycnostachyus var. pycnostachyus, or the coastal marsh milk-vetch, is a herb species listed as 1B.2 under the CRPR that is endemic to the California coastline. This species can reach up to 1 meter tall with hairy, cupped leaflets. The inflorescence consists of many cone-shaped yellow flowers.

Habitat:

The coastal marsh milk-vetch favors cool areas in coastal dune or scrub communities and often favors moist areas in marshes and swamps along the coast, usually in elevations below 155 meters.

Proximity/ Potential for Occurrence:

This species is known to occur within 5 miles west of the property boundary located near Lake Lucerne. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the coastal marsh milk-vetch.

San Mateo woolly sunflower (*Eriophyllum latilobum*)

Status/Description:

Eriophyllum latilobum, or the San Mateo woolly sunflower, is state and federally endangered and is listed as a 1B.1 species under the CRPR. This flowering herb can reach up to 3 feet tall and has triangularly lobed leaves. The inflorescence is comprised of ray and disc flowers that are yellow in coloration that is encompassed with acute phyllaries.

Habitat:

This species favors oak woodlands and grows in foothill woodland, cismontane woodland, coastal scrub, lower montane coniferous forest usually in elevations between 45 and 330 meters.

Proximity/ Potential for Occurrence:

There is one occurrence of this species located within 5 miles north of the property boundary near San Mateo County Memorial Park. The treatment areas do not contain any potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the San Mateo woolly sunflower.

minute pocket moss (*Fissidens pauperculus*)

Description/ Status:

Fissidens pauperculus, or the minute pocket moss, is listed as a 1B.2 species under the CRPR. This species has oblong leaves that are strongly folded and light green to dark green in coloration. The leaves consist of the 3 parts including the strongly folded lamina, apical lamina, and dorsal lamina.

Habitat:

Minute pocket moss grows on bare, moist soil banks commonly near the base of redwood trees.

Proximity/ Potential for Occurrence:

This species is presumed to be present in one location within 1 mile south of the property boundary near Little Butano Creek and in one location within 5 miles north of the property boundary near Pescadero Creek and Old Haul Road. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to minute pocket moss.

Toren's grimmia (*Grimmia torenii*)

Description/ Status:

Grimmia torenii, or Toren's grimmia, is a moss that is listed as a 1B.3 species under the CRPR. This species reaches approximately 1.5 cm in length and appears green, grey-green, opaque-green, to black in coloration. The leaves are ovate-lanceolate with entire to incurved margins. The urns are erect and symmetrical and smooth to slightly wrinkled when dry.

Habitat:

This species favors rocky openings within chaparral, cismontane woodland, and lower montane coniferous forest communities between 325 and 1160 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles west of the property boundary near Gazos Creek and China Grade Road. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to Toren's grimmia.

Butano Ridge cypress (*Hesperocyparis abramsiana var. butanoensis*)

Description/ Status:

Hesperocyparis abramsiana var. butanoensis, or the Butano Ridge Cypress, is a tree endemic to California and is listed as a 1B.2 species under the CRPR. This species can reach approximately 15 meters in height and has fibrous bark with thin vertical strips or plates. The needles are scale-like and bright to deep green in coloration. Male cones are quadrangular and contain approximately 4-6 pollen sacs per scale. Mature seed cones are spheric to widely elliptic, brown in coloration, and contain approximately 8-10 scales.

Habitat:

This species is known only to occur along the Butano Ridge within the Santa Cruz Mountains within chaparral or closed-cone pine forest communities between 400 and 490 meters in elevation.

Proximity/ Potential for Occurrence:

There is one known occurrence of this species located within 5 miles of the property boundary near Butano Ridge and Butano Creek. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the Butano Ridge cypress.

perennial goldfields (*Lasthenia californica ssp. macrantha*)

Description/ Status:

Lasthenia californica ssp. macrantha, or the perennial goldfields, is a perennial herb listed as a 1B.2 species under the CRPR. This species has a decumbent, branched, burgundy stem with linear to oblong, entire or toothed leaves. The inflorescence is a bell-shaped involucre with ray and disc flowers that appear yellow in coloration.

Habitat:

This species favors grasslands and dunes along the coast within northern coastal scrub communities below 500 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur in two locations within 5 miles west of the property boundary along Highway 1 near Bean Hallow State Beach and Pigeon Point. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the perennial goldfields.

rose leptosiphon (*Leptosiphon rosaceus*)

Description/ Status:

Leptosiphon rosaceus, or the rose leptosiphon, is an annual herb that is listed as a 1B.1 species under the CRPR. This short-stemmed herb has narrowly obovate to linear leaves with rounded tips and an inflorescence that consists of fused petals that are pink to yellow to white in coloration and glabrous sepals.

Habitat:

This species favors open, grassy slopes within coastal bluff scrub communities below 100 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles northwest of the property boundary near Pebble Beach. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the rose leptosiphon.

Point Reyes meadowfoam (*Limnanthes douglasii spp. sulphurea*)

Description/ Status:

Limnanthes douglasii spp. sulphurea, or the Point Reyes meadowfoam, is annual herb endemic to California that is listed as a 1B.2 species under the CRPR. The Point Reyes meadowfoam can reach approximately 1.6 feet tall and develops yellow flowers that consist of five notched, or heart-shaped, petals with yellow anthers. The leaflets are ovate and irregularly toothed or lobed.

Habitat:

This species favors full-sun locations within wetland and coastal prairie communities on the edges of meadows, freshwater-marshes, and vernal-pools, generally below 3,300 feet in elevation.

Proximity/ Potential for Occurrence:

The Point Reyes meadowfoam is known to occur in one location within 1 mile south of the property boundary located near Butano Creek. It is unlikely that there is potentially suitable habitat within the treatment areas.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the Point Reyes meadowfoam.

marsh silverpuffs (*Microseris paludosa*)

Description/ Status:

Microseris paludosa, or the marsh silverpuffs, is a perennial herb endemic to California and listed as a 1B.2 species under the CRPR. This species is leafy near the base with entire to lobed leaves. The inflorescence is an involucre with black hairs and linear to ovate, tapered phyllaries. The flower is yellow to orange in coloration and produces a straw colored or white, smooth fruit with pappus scales.

Habitat:

This species favors moist grasslands or open woodlands within northern coastal scrub, cismontane woodland, valley and foothill grassland, or closed-cone pine forest communities below 300 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles northwest of the property boundary near Pescadero State Beach. Treatment areas are unlikely to contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to marsh silverpuffs.

Kellman's bristle moss (*Orthotrichum kellmanii*)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Description/ Status:

Orthotrichum kellmanii, or Kellman's bristle moss, is a moss endemic to California that is listed as a 1B.2 species under the CRPR. This species appears to be green to yellow to orange in coloration with slightly succulent leaves that have pointed tips.

Habitat:

This species favors sandstone and carbonate rocks within chaparral and cismontane woodlands between 343 and 685 meters elevation.

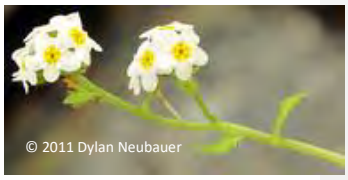
Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles east of the property boundary near gazos Creek and China Grade Road. Treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to Kellman's bristle moss.

Choris' popcornflower (*Plagiobothrys chorisianus var. chorisianus)*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Description/Status:

The Choris' popcornflower, or *Plagiobothrys chorisianus var. chorisianus,* is a California endemic herb that is listed as a 1B.2 species under the CRPR. This species has a decumbent to erect, branching stem with spiny hairs and sheathing leaves. The inflorescence have bracts at the base and are comprised of a white, lobed corolla with yellow coloration from the center.

Habitat:

This species grows in moist, grassy areas in wetlands or ephemeral drainages. The Choris' popcornflower favors coastal prairie, chaparral, northern coastal scrub, and wetland-riparian communities below 240 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles of the property boundary near the Mesa. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the Choris' popcornflower.

San Francisco popcornflower (*Plagiobothrys diffuses*)

Description/ Status:

Plagiobothrys diffuses, or the San Francisco popcornflower, is an annual herb endemic to California and is listed as a 1B.1 species under the CRPR. This species can reach approximately 2-9.8 inches in height and has alternating, linear leaves. The sepals are hairy and many linear bracts are located throughout the inflorescence, which consists of a yellow to white corolla. This species produces nutlets that are approximately 1-1.5 mm long and ovate.

Habitat:

This species favors sparsely vegetated areas within coastal prairie and valley grassland communities between 30 and 150 meters in elevation.

Proximity/ Potential for Occurrence:

There is one known occurrence of this species located within 5 miles south of the property boundary near Whitehouse Canyon Road and Highway 1. The treatment areas are unlikely to contain any potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the San Francisco popcornflower.

Scouler's catchfly (*Silene scouleri ssp. scouleri*)

Description/ Status:

Silene scouleri ssp. Scouleri, or the simple campion, is a perennial herb listed as a 2B.2 species under the CRPR. This species has an erect stem that is densely puberulent and oblanceolate to elliptic lower leaves and lanceolate to ovate upper leaves. The flowers are subsessile to pedicelled with hairy, veined calyx that are white to pink in coloration.

Habitat:

This species favors rocky slopes and coastal bluffs within northern coastal scrub or valley and foothill grassland communities below 600 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur within 5 miles southwest of the property boundary near the Mesa and Bean Hallow Lakes. Treatment areas do not contain potentially suitable habitat for Scouler's catchfly.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to Scouler's catchfly.

Santa Cruz microseris (*Stebbinsoseris decipiens*)

Description/ Status:

Stebbinsoseris decipiens, or the Santa Cruz microseris, is an annual herb endemic to California and is listed as a 1B.2 species under the CRPR. This species has primarily basal leaves that are entire to pinnately lobed with hairs that dry as white scales. The inflorescence is a liguliflorous head with yellow to white ligules. The fruit is spindle-shaped with dark purple tips located at the base of the pappus.

Habitat:

This species favors open, serpentinite areas within northern coastal scrub, closed-cone pine forest, mixed evergreen forest, chaparral, and coastal prairie communities below 500 meters elevation.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles of the property boundary near Cascade Creek. Treatment areas may contain or be in proximity to potentially suitable habitat for this species.

Potential for Impact:

Due to the treatment areas containing or being within proximity to potentially suitable habitat, a survey will be conducted during the peak bloom period a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the Santa Cruz microseris.

WILDLIFE SPECIES:

Santa Cruz black salamander (*Aneides niger)*

Description/ Status:

Aneides niger, or the Santa Cruz black salamander, is endemic to California and is listed as a CDFW species of special concern. Males have snouts that range from 68.8-85.7 mm and a head width of 10.5-16.3 mm, whereas female snouts range from 58.3 mm-73.7 mm and head widths range from 8.9-10.9 mm. Adults have uniform shiny, black coloration without spots. Juveniles have small white spots that cover dorsal and ventral surfaces, that occasionally exhibit grey, green, or black coloration beneath the spotting.

Habitat:

This species occurs in mixed deciduous woodland, coniferous forests, and coastal grasslands in California. This species can be found in riparian areas near streams and under damp debris, but do not inhabit streams.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles south of the property boundary near Old Woman's Creek. The treatment areas may be in proximity to potentially suitable habitat.

Potential for Impact:

Due to the treatment areas being in proximity to potentially suitable habitat, a survey will be conducted a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the Santa Cruz black salamander.

pallid bat (*Antrozous pallidus)*

Description/Status:

The pallid bat, or *Antrozouz pallidus,* is a CDFW species of special concern. Adults can reach approximately 60 to 85 mm in length including its tail and has a wingspan of approximately 90 to 120 mm wide. This species is dorsally cream-yellow to light brown in color and pale to white on its underside with woolly fur. The pallid bat has wart-like glands near the nose that secrete an odor as a defense mechanism and have a U-shaped ridge above their nostrils. The ears are large and pointed with serrated edges.

Habitat:

This species favors rocky outcrops in semi-arid climates within grasslands, chaparral, oak woodlands, and coniferous forests. The pallid bat diet consists of ground-dwelling prey like small mammals or reptiles and large flying or ground-dwelling insects.

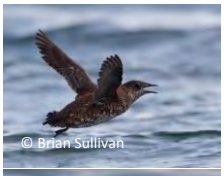
Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles north of the property boundary near Newell Gulch. Treatment areas may contain potentially suitable habitat for this species.

Potential for Impact:

Due to the treatment areas containing potentially suitable habitat, a survey will be conducted a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the pallid bat.

marbled murrelet (*Brachyramphus marmoratur)*



Description/Status:

Brachyramphus marmoratur, or the marbled murrelet, is a state endangered and federally threatened seabird species. The marbled murrelet is a small seabird species that has an approximate wingspan of 10 inches wide. This species appears red-brown with mottled, white spots during the breeding season and appear to have dark grey backsides and white undersides with white patches on the face and shoulder areas during the nonbreeding season.

Habitat:

This species favors nesting sites in old-growth coniferous forests or rocky talus slopes near the Pacific Ocean, up to approximately 15 miles inland. The marbled murrelet nests on large branches approximately 4 inches in diameter or larger that create a platform that may be screened from predators or wind by branches of nearby trees, where the female will lay one yellow, olive, or blue-green egg with brown, black, and lavender specks. This seabird forages in coastal marine habitats, dieting on primarily fish and crustaceans.

Proximity/ Potential for Occurrence:

This species has approximately 5 occurrences within 1 mile of the property boundary, where two occurrences are located to north in Butano Creek, one occurrence is located to the east in Girl Scouts Creek, and two occurrences are located to the southeast in Little Butano Creek. Additionally, several other occurrences are located within 5 miles of the property boundary predominately located in proximity to Pescadero Creek, Butano Creek, Little Butano Creek, and Berry Creek. Based on an analysis of the project area, CDFW has determined that the treatment areas do not contain potentially suitable habitat for marbled murrelets at this time (Attachment F).

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the marbled murrelet.

western bumble bee *(Bombus occidentalis)*

Status/Description:

Bombus occidentalis, or western bumble bee, is a state candidate endangered species. The females, or worker and queens, have 12 antenna segments and six segments with a yellow thorax and yellow sides on the abdominal segment and a reddish-black fifth segment. Males have similar coloration, except they have 7 abdominal segments and 13 antenna segments. This species as six segmented legs with thin wings that are approximately the same size as the body.

Habitat:

This is a pollinator species that associates with a wide range of flowering plants and crops within open coniferous, deciduous and mixed-woodland forests, wet and dry meadows. The western bumble bee is capable of foraging in cold, rainy weather conditions and commonly nests underground.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles of the property boundary near Highway 1 and Gazos Creek. It is unlikely that the treatment areas contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the western bumble bee.

western snowy plover (*Charadrius alexandrines nivosus*)

Description/ Status:

Charadrius alexandrines nivosus, or the western snowy plover, is a federally threatened shorebird species. This species is approximately 15-17 cm in length, which is generally smaller than other plover species, and consists of pale brown upper surfaces, dark patches on the upper chest, white undersides, and dark grey to black legs.

Habitat:

This species favors coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, and estuaries at the mouths of rivers or creeks. The western snowy plover breeds above high tide lines and nests are generally located on flat, open areas where females will lay approximately 2-6 eggs.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles of the property boundary near Franklin Point. Treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the western snowy plover.

Townsend's big eared bat (*Corynohinus townsendii)*

Description/Status:

The Townsend's big eared bat, or *Corynohinus townsendii,* is a CDFW species of special concern. This medium-sized bat can reach approximately 90 to 115mm long and has large ears that can reach approximately 38 mm in length and are curved when relaxed. The dorsal side of this species is brown or pale grey and the underside is generally buff or tan colored. The Townsend's big eared bat has two large glands beside the elongated nostrils and there are generally no visible differences between sexes.

Habitat:

This species favors dense coniferous forests, native prairies, and coastal communities usually below 3,300 meters elevation. This bat prefers dark, open caves or cliffs in cold areas for roosting and does not roost in rock crevices. The primary food source for this species is moths, however, beetles and other small insects are also common.

Proximity/ Potential for Occurrence:

This species is known to occur within 5 miles of the property boundary within the Big Basin Quadrangle, however, exact occurrence coordinates are not recorded. The treatment areas may contain potentially suitable habitat.

Potential for Impact:

Due to the treatment areas containing potentially suitable habitat, a survey will be conducted a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the Townsend's big eared bat.

California giant salamander (*Dicamptodon ensatus)*

Description/ Status:

Dicamptodon ensuatus, or the California giant salamander, is a CDFW species of special concern. Adults are stout with a long tail reaching about 30 cm in total length. The bodies are light brown to brassy and have distinct dark patches. The front two feet have four toes and the hind feet have five toes.

Habitat:

The California giant salamander requires habitat with cover for hiding, sun protection, and breeding and can be found under rocks, logs, or stones. This species' aquatic habitat consists of lakes, ponds, rivers, streams, or fast-moving water. Females deposit 85-200 eggs underwater and protect the eggs until they hatch. This species has a relatively slow reproduction rate due to long gestation period and they do not reach sexual maturity until they are 5-6 years old.

Proximity/ Potential for Occurrence:

The California giant salamander is known to occur in one location within 1 mile south of the property boundary near Butano Creek and the junction of Canyon Road and Cloverdale Road. This species is known to occur in several locations within 5 miles north and south of the property boundary near Pescadero Creek and Gazos Creek. The treatment areas may be in proximity to potentially suitable habitat for this species.

Potential for Impact:

Due to the treatment areas being in proximity to potentially suitable habitat, a survey will be conducted a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the California giant salamander.

western pond turtle (*Emys marmorata*)

Description/ Status:

Emys marmorata, or the western pond turtle, is a CDFW species of special concern. The western pond turtles are yellow-ish with dark blotches on the dark brown to olive, smooth shell with webbed toes. Adult males have a large head, pointy snout, thick tail base, and wide

neck with white and yellow coloration. Adult females have blunt snouts, a thin tail base, and a dark throat and chin. Juveniles have long tails, soft shells, and are light brown.

Habitat:

The habitat for this species consists of aquatic and terrestrial environments, including lakes rivers, streams, ponds, wetlands, vernal pools, creeks, reservoirs, agricultural ditches, estuaries, and brackish waters. Adults favor deep waters while juveniles favor shallow waters, however, both prefer slow moving water. Terrestrial habitats consist of burrows in leaves or soil during the winter season. Nests are built away from water in flat areas with short vegetation and dry soils. The western pond turtle feeds on crustaceans, midges, fish, dragonflies, beetles, and other invertebrates and algae or plant material. Development is a threat to this species.

Proximity/ Potential for Occurrence:

This species is known to occur in several locations within 5 miles northwest and south of the property boundary predominately located near Pescadero State Beach and Cascade Ranch State Park. Treatment areas may be in proximity to potentially suitable habitat for this species.

Potential for Impact:

Due to the treatment areas being in proximity to potentially suitable habitat, a survey will be conducted a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the western pond turtle.

tidewater goby (*Eucyclogobius newberryi*)

Description/ Status:

Eucyclogobius newberryi, or the tidewater goby, is a federally endangered fish species. The tidewater goby is a small, elongated, grey-brown fish that can reach approximately 2.7-5.7cm in length at maturity. This species has large pectoral fins and the ventral fins are joined, forming an abdominal disc. Males are generally nearly transparent with mottled brownish coloration on the upper surface. Females are darker in coloration and often appear black on the dorsal and anal fins and have grey or brown pectoral fins. This species is oviparous and the eggs are laid in sandy, nesting burrows created by the males.

Habitat:

The tidewater goby favors shallow, brackish waters at the mouth of freshwater streams and coastal lagoons. This species feeds on crustaceans, dipteran larvae, gastropods, and invertebrate eggs.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within within 5 miles northwest of the property boundary located near the Pescadero State Park Beach. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the tidewater goby.

American peregrine falcon (*Falco peregrinus anatum*)

Description/ Status:

Falco peregrinus anatum, or the American peregrine falcon, is a CDFW fully protected species and species of special concern. This species is approximately 36 to 49 cm in length and has a wingspan ranging from 100 to 110 cm wide. The wings and tail are long and pointed. Adults are dark grey to brown on their backs and head and have a pale white underside with dark markings. The yellow bill is strongly hooked and has a yellow ring around the eyes.

Habitat:

The peregrine falcon occurs primarily in coastal areas with open landscapes. This species nests in cliffs along rivers and the coastline. The nests are simply depressions in the ledges formed from the peregrine falcon scraping the sand, gravel, or substrate to approximately 2 inches deep. The peregrine falcon lays 2-5 pale brown eggs that are dotted with red, brown, or purple. The primary diet of this species is shorebirds and bats, but also prey on small rodents and fish.

Proximity/ Potential for Occurrence:

This species is known to occur within 5 miles of the property boundary within the Mindego Hill Quadrangle, however, exact occurrence coordinates are not recorded. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the American peregrine falcon.

saltmarsh common yellowthroat (*Geothlypis trichas sinuosa)*

Description/Status:

Geothlypis trichas sinuosa, or the saltmarsh common yellowthroat, is a CDFW species of special concern and is endemic to California. Adult males are brown to tan with a yellow throat and underside with a black mask around its eyes, whereas females are primarily brown, grey or tan without a mask or changes in coloration. This species is small, reaching approximately 13 cm in length.

Habitat:

This species prefers herbaceous wetland and salt marsh communities usually below 450 meters elevation. Small, cup-shaped nests are usually well-hidden by tall vegetation less than approximately 1 meter above ground. Females will lay 3-6 white eggs with dark spots on one end of the egg. This species primarily consumes insects like spiders and caterpillars.

Proximity/ Potential for Occurrence:

This species is known to occur in several locations within 5 miles northwest of the property boundary predominately located near Pescadero State Beach. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to saltmarsh common yellowthroat.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens)*

Description/Status:

The San Francisco dusky-footed woodrat, or *Neotoma fuscipes annectens,* is a CDFW species of special concern. This rodent species can reach approximately 9 inches in length and the tail adds approximately 6.5 to 8 inches to its length. The underside of this woodrat is white or grey and the dorsal side is primarily brown or grey in coloration. The San Francisco dusky-footed woodrat has large round ears and light colored, slightly hairy feet.

Habitat:

This species prefers moderate canopy coverage in oak woodland, chaparral or shrubland, and coniferous forest communities. The San Francisco dusky-footed woodrat builds complex nests from sticks and debris that can reach up to approximately 8 feet wide and 6 feet tall. Nests are typically occupied by a single adult, except for a short period of time after the female gives birth to her pups. The diet for this species consists of woody plant species such as maple, coffeeberry, alder, live oak, and elderberry.

Proximity:

The CNDDB search did not return any occurrences within 5 miles of the property boundary, however, potentially suitable habitat is present within property.

Potential for Impact:

Due to the treatment areas containing potentially suitable habitat, a survey will be conducted a minimum of one week prior to operations (see survey protocol above). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the San Francisco dusky-footed woodrat.

steelhead – central California coast (*Onchorhynchus mykiss irideus pop.8*)

Description/Status:

Onchorhynchs mykiss irideus pop.8, or the central California coast steelhead, is a federally threatened species along the central coast of California. This anadromous trout species can range from approximately 35 to 65 cm in length and can weigh up to approximately 12 pounds. Adults appear primarily silver in coloration with pink cheeks and green backs and often have black spots along the tail and fins. Juveniles resemble adults in color, however, they have an additional dark oval marks located along the lateral line and between the head and dorsal fin.

Habitat:

This is an anadromous fish species that occurs in freshwater Pacific coast streams. This steelhead species will migrate to marine waters once it nears maturity, then returns to freshwater streams for spawning. Typically, this species requires a minimal of approximately 7 inches of water depth for migration and favors spawning habitat between 6 and 24 inches deep, usually in slow moving currents. High water velocities and low water depth can impede on this species' capability to migrate.

Proximity/ Potential for Occurrence:

This species has two known occurrences within 5 miles of the property boundary located in Pescadero Creek near San Mateo Memorial Park and in Whitehouse Creek in Cascade Ranch State Park. There is potential for this species to occur within Butano Creek within the property boundary and within 1 mile of the property boundary, however, treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the central California coast steelhead.

mountain lion (*Puma concolor)*

Description/ Status:

Puma concolor, formerly *Felis concolor,* or the mountain lion, is a CDFW candidate endangered species. Adult mountain lions have a tan coat and white to cream underside. Males and females appear the same in coloration, however, males can reach approximately 6 to 8 feet in total length whereas females are generally smaller reaching approximately 5-7 feet in length. Mountain lion cubs have dark spots on their bodies and rings around their tails that fade as they mature.

Habitat:

This species prefers dense vegetative areas within mountain ranges of coniferous forests, scrub and oak woodlands, and arid communities. Mountain lions are territorial and development has limited their available habitat. This species is an opportunistic hunter that primarily feeds on deer, farm animals, and small mammals such as coyotes, raccoons, and feral pigs.

Proximity/ Potential for Occurrence:

There are currently no recorded occurrences of this species within 5 miles of the treatment area, however, mountain lions frequent the Santa Cruz Mountains and there is potentially suitable habitat within or in proximity to the property boundary.

Potential for Impact:

During the biological survey, a field evaluation was conducted to assess the potential for impact on this species due to the project area containing potentially suitable habitat. Based on the biological surveys and the pre-operational meeting; no impact is expected to occur to the mountain lion.

foothill yellow-legged frog (*Rana boylii*)

Description/ Status:

Rana boylii, or the foothill yellow-legged frog, is a frog from the genus Rana in the family Ranidae that is a state endangered species. The foothill yellow-legged frog is a small-sized 3.72–8.2 cm (1.46–3.23 in) that ranges from gray, brown, olive, or reddish in coloration. This species often has dark molting or spots and yellow undersides on its hind legs.

Habitat:

Habitat is primarily foothill and mountain streams with rocky substrate in open, sunny banks within forests, chaparral, or woodland communities.

Proximity/ Potential for Occurrence:

This species is known to occur in two locations within 5 miles of the property boundary in proximity to Pescadero Creek near San Mateo Memorial Park. The treatment areas do not contain any potentially suitable habitat for this species.

Potential for impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the foothill yellow legged frog.

California red-legged frog (*Rana draytonii*)

Description/ Status:

Rana draytonii, or the California red-legged frog, is a federally threatened species and CDFW species of special concern. This species ranges from 1.75-5.25 inches long with reddish-brown or brown, gray, or olive coloration. The skin is smooth with small black spots on the back and dark bands on the legs. The hind legs and belly are red on the underside and the chest region is creamy and marbled with gray.

Habitat:

Common habitat consists of locations near ponds or along streams in humid forests, grasslands, and coastal scrub communities that contain plant cover. This species breeds in permanent water sources and requires moist refuges, like animal burrows, for cover in the dry season.

Proximity/ Potential for Occurrence:

This species has one occurrence within 1 mile of the property boundary located near Butano Creek and the junction of Canyon Road and Cloverdale Road. Approximately 8 occurrences are located within 5 miles of the property boundary between Cloverdale Road and Bean Hollow Lakes. Several additional occurrences are located within 5 miles of the property boundary in proximity to Butano Creek, Pescadero State Beach, McCormick Creek, Little Butano Creek, Whitehouse Creek, Gazos Creek, and along Highway 1 between Franklin Point and Pescadero Creek Road. The treatment areas are located more than 300 feet from occupied habitat and do not contain any potentially suitable habitat, however, the treatment areas may be in proximity to potentially suitable habitat.

Potential for Impact:

Due to the project areas being in proximity to potentially suitable habitat and the proximity to treatment areas, presence will be assumed for California red-legged frog and take Scenario III and IV will be implemented as described in the PSA (Impact BIO-2). Based on the biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the California red-legged frog.

bank swallow (*Riparia riparia*)

Description/ Status:

Riparia riparia, or the bank swallow, is a state threatened bird species. The bank swallow has a wingspan of approximately 9.8-13 inches with pointed tips and a slightly forked tail. The body is round and consists of a white underside with a brown band across the chest and brown to dark brown upper surfaces and underwings. A white band is located on the chin and neck.

Habitat:

This species favors coastal habitats within holes dug out of cliffs and river banks with fine textured, sandy soils near a source of water. Burrows are dug by the males and can reach approximately 25 inches into the bank, where females lay approximately white 3-5 eggs. Feeding occurs primarily over grassland, shrubland, cropland, and open riparian areas and consists of soft-bodied insects.

Proximity/ Potential for Occurrence:

The bank swallow has potential to occur within 5 miles northwest of the property boundary near Pescadero State Beach. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the bank swallow.

Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*)

Description/ Status:

Speyeria zerene myrtleae, or Myrtle's silverspot butterfly, is a federally endangered butterfly species. This butterfly has a wingspan of approximately 2.2 inches and the upper wing surfaces appear golden brown to orange with black spots and lines. The undersides of the wings are brown, orange-brown, and tan with silver and black spots and black lines. Females lay their eggs in larval food plants, such as dried violet stems, where the caterpillars forage upon hatching and form their pupa.

Habitat:

This species favors habitat within 3 miles of the coast that is sheltered from wind within coastal dune and coastal prairie habitat and below 250 meters in elevation. Myrtle's silverspot butterfly relies on plants such as gum plant (*Grindelia rubicaulis*), yellow sand verbena (*Abronia latifolia*), coyote mints (*Monardella spp.*), bull thistle (*Cirsium vulgare*), and seaside daisy (*Erigeron glaucus*) as sources of nectar and violets, specifically *Viola adunca*, for laying eggs and larval food.

Proximity/ Potential for Occurrence:

Myrtle's silverspot butterfly occurred in one location within 5 miles north of the property boundary near the Pescadero Elementary School, however, this population is considered to be extirpated. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to Myrtle's silverspot butterfly.

longfin smelt (*Spirinchus thaleichthys*)


© NOAA

Description/ Status:

Spirinchus thaleichthys, or the longfin smelt, is a California threatened species and federal candidate species endemic to California and Alaska. This anadromous fish can reach between 3.5 – 4.3 inches in length and has long pectoral fins that reach the pelvic fins. The longfin smelt appears silver to transparent in coloration with light grey to brown coloration on the upper surface. Spawning occurs in freshwater over sandy or gravel substrates, where females can lay between 5,000 and 24,000 adhesive eggs.

Habitat:

This species is euryhaline, meaning it can tolerate a wide range of salinities, and favors nearshore waters, estuaries, and lower freshwater streams. The longfin smelt forages on small shrimp-like crustaceans, such as opossum shrimp.

Proximity/ Potential for Occurrence:

This species is known to occur in one location within 5 miles north west of the property boundary near Pescadero Creek and Pescadero Elementary School. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the longfin smelt.

American badger (*Taxidea taxus)*


© Ryan Haggerty

Description/ Status:

Taxidea taxus, or the American badger, is a CDFW species of special concern. The American badger has thick brown or black fur with white stripes on its cheeks and an upturned nose. They have short and stout legs with a flat body that reaches approximately 1.5-2 ft in length, are muscular, and have long claws. The adult females will prepare a large burrow up to 10 ft below the surface for her offspring.

Habitat:

Habitat consists of open areas such as prairies, farmland, and plains as well as edges of woods. The American badger is a nocturnal carnivore and its diet primarily consists of small rodents, reptiles, birds, and insects.

Proximity/ Potential for Occurrence:

This species is known to occur in two location within 5 miles of the property boundary within Butano State Park and near Pigeon Point Light Station. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the American badger.

San Francisco gartersnake (*Thamnophis sirtalis tetrataenia)*

Description/Status:

The San Francisco gartersnake, or *Thamniphis sirtalis tetrataenia,* is a California fully protected species and federally endangered species endemic to the San Francisco Bay area of California. Adults can reach 18 to 55 inches in length and have large eyes on the sides of their narrow head. This species has many dorsal stripes that are blue-green or greenish yellow to white, black, and red with a blue-green underside and red head.

Habitat:

This species favors openings in grasslands or wetland areas near ponds, marshes, or sloughs and is capable of swimming. During the dry season, the San Francisco gartersnake may become dormant in rodent burrows. The primary diet consists of amphibians, small mammals, reptiles, earthworms, slugs, slugs an leeches.

Proximity/ Potential for Occurrence:

The CNDDB does not have coordinates for the occurrences of this species, however, San Francisco gartersnake occurrences have been recorded and are presumed to be present within the Mindego Hill quadrangle. The treatment areas do not contain potentially suitable habitat for this species.

Potential for Impact:

Based on this species' proximity to the project area, unfavorable habitat conditions, biological surveys, the pre-operational meeting, and mitigation measures to cease operations if this species were discovered during operations; no impact is expected to occur to the San Francisco gartersnake.

Attachment E

Botanical Survey Report

(Please see the following pages)

SAN MATEO RESOURCE CONSERVATION DISTRICT

PHONE: 650.712.7765

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HALF MOON BAY, CA 94019

SANMATEORCD.ORG

May 28, 2021

Shelby Kranich
ARC – Auten Resource Consulting
116 Martinelli Street, Suite #8
Watsonville, CA 95076

Re: Camp Butano Creek VTP Botanical Survey (May 10, 2021)

Dear Shelby Kranich,

This letter provides the results of the focused botanical survey conducted for the Camp Butano Creek VTP located on Girl Scouts of Northern California property in Pescadero, San Mateo County, California. The project intends to reduce fuel loads through mechanical and manual treatment of understory vegetation, dead and dying or diseased trees, hazard trees, and small diameter trees. Ecologically restorative treatments will reduce potential ignition sources to improve the forest's health and vigor and promote a more resilient residual stand.

The purpose of this survey is to inventory all vascular plants and detect any special-status vascular plants or communities that may be impacted by forest health and fuels reduction activities. A search of nearby records indicated the likelihood of thirteen taxa that are considered rare and may be encountered on the project site (Table 1). I conducted one survey on May 10, 2021 with negative results for special-status plant species. The results of the survey and methods are presented below.

Setting

The Camp Butano Creek VTP is a 44.3-acre area within the Girl Scouts of Northern California, Camp Butano Creek property. The area lies in the Franklin Point 7.5' Quadrangle within the Santa Cruz Mountains. Dense evergreen forests surround the project area on the northwest facing side of a valley that holds Butano Creek. Slopes in the project area are level to moderately steep ranging from 234 ft (71 m) to 605 ft (184 m) in elevation. Two class III creeks, Girl Scout Creek and an unnamed tributary bisect the project and eventually drain into Butano Creek.

Methodology

I conducted a botanical survey in late spring on May 10, 2020 according to the California Department of Fish and Wildlife *Protocols for Surveying and Evaluating Impacts to Special Status native Plant Populations and Sensitive Natural Communities* (2018). The survey was

conducted during a time seasonally appropriate for detecting and identifying all vascular plants to a sufficient taxonomic level to determine their rarity and rank. The survey was conducted on foot and required 7 hours to complete (See route map). The survey included a significant sample of all vegetation types and elevation ranges present within the project area. The survey encompassed primarily seasonal roads, chosen for their proximity to the largest anticipated project impacts, and the greatest representation of all potential vegetation types present. See a full list of species on Table 2.

History

A portion of the project area was burned during the 2020 CZU Lightning Complex.

Natural Communities

The project area is predominantly within second growth coastal redwood (*Sequoia sempervirens*). Where the slope aspect faces south, at higher elevations, coast redwood forest converts to predominantly Douglas fir (*Pseudotsuga menziesii*) and tankoak (*Notholithocarpus densiflorus*). Other mixed-evergreen species, California bay (Umbellularia californica), big leaf maple (*Acer macrophyllum*), Shreve oak (*Quarcus parvula var. shrevei*), madrone (*Arbutus menziesii*) and California nutmeg (*Torreya californica*) are scattered throughout the forested areas.

Forest understory varies due to canopy density, aspect and elevation, but includes such species as pink honey suckle (*Lonivera hispidula*), Western sword fern (*polystichum munitum*), redwood sorrel (*Oxalis oregana*), wood fern (*Dryopteris arguta*), milkmaids (*Cadamine californica*), Pacific sanicle (*Sanicula crassicaulis*), evergreen huckleberry (*Vaccinium ovatum*), and creeping snowberry (*Symphoricarpos mollis*).

Forest openings where the canopy has opened contain a higher array of annual herbaceous species including subterranean clover (*Trifolium subterraneum*), varied leaved collomia (*Collomia heterophylla*), mousear chickweed (*Cerastium viscosum*), featherweed (*Gamochaeta ustulata*), sou thistle (Sonchus oleraceus), hop clover (Trifolium campestre), jubata grass (*Cortaderia jubata*), and English plantain (*Plantago lanceolata*). Other openings facing south are characterized by blue blossom (*Ceanothus thrysiflorus*), Torrey's melica (*Melica torreyana*), white flowered hawkweed (*Hieracium albiflorum*), toyon (*Heteromeles arbutifolia*), and woodland madia (*Anisocarpus madioides*).

Creek areas, crossing Girl Scout creek and an unnamed creek, support mesic species like western chain fern (*Woodwardia fimbiata*), brittle fern (*Cystopteris fragilis*), redwood violet (*Viola sempervirens*), sedge (*Carex sp.*), western wakerobin (*Trillium ovatum*), elkclover (*Aralia californica*), and thimbleberry (*Rubus parviflorus*).

Vegetation surrounding the campgrounds and existing infrastructure is dominated by coastal redwood included an assemblage of native and non-native species like bull thistle (*Cirsium vulgare*), yerba buena (*Clinopodium douglasii*), coyote brush (*Baccharis pilularis*), madrone

(*Arbutus menziesii*), Italian thistle (*Carduus pycnocephalus var. pycnocephalus*), six week fescue (*Festuca myuros*), English ivy (Hedera helix), modesty (*Whipplea modesta*), and California black berry (*Rubus ursinus*).

Special-status Plants

No special-status species were observed during this survey.

Sensitive Natural Communities

The project area is within predominantly redwood (*Sequoia sempervirens*) forest and woodland as defined in the *Manual of California Vegetation* (Sawyer et al. 2009). Redwood forests are dominated (greater than 50% relative cover) by coastal redwood and may be co-dominant with other tree species such as Douglas fir (*Pseudotsuga menziesii*) and tanoak (*Notholithocapus densiflorus*). Redwood forests and woodland is considered a sensitive natural community under the CalVTP PEIR and an Environmentally Sensitive Habitat Area (ESHA) under the California Coastal Commission, based on the alliance's rarity ranking of G3 S3.2[1]. The project treatments and prescription are designed to benefit these communities and habitat as outlined with significant evidence in the Camp Butano Creek VTP Project-Specific Analysis (PSA), Impact BIO-3. During the protocol level survey, no additional sensitive natural communities were identified within the project area.

Invasive Species

Italian thistle (*Carduus pycnocephalus var. pycnocephalus*), bull thistle (*Cirsium vulgare*), jubata grass (*Cortaderia jubata*), panic veldt grass (*Ehrhata erecta*), French broom (*Genista monspessulana*), English ivy (*Hedera helix*), and velvet grass (*Holcus lanatus*) are all species that can take advantage from project disturbance. Monitoring any changes in these infestations following project implementation will be important for reducing their spread.

Feel free to contact me if you have any questions.

Sincerely,

Cleopatra Tuday
Biologist
San Mateo Resource Conservation District

[1] Although not specified in the San Mateo County Local Coastal Plan (2013), the ESHA determination is based on consultation with the California Coastal Commission and by a 2016 ESHA workshop that further defined ESHAs within the Coastal Zone.

Table 1. Special-status Plant Species with the Potential to Occur in the Study Area

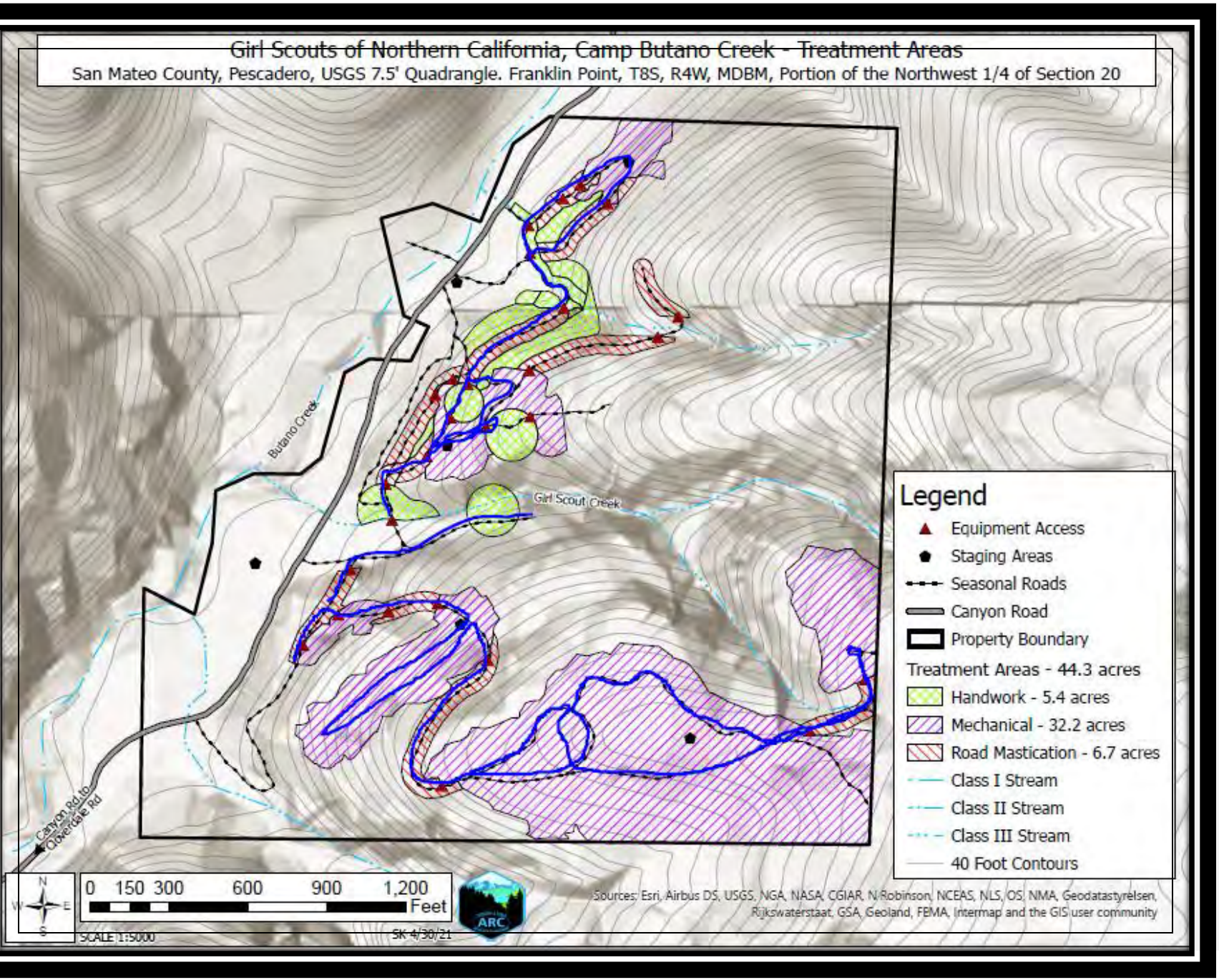
Scientific Name	Common name	Listing Status	Habitat Requirements
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	1B.2	Coastal dunes (mesic), Coastal scrub, Marshes and swamps (coastal salt, streamsides) (Apr)Jun-Oct
Silene scouleri ssp. scouleri	Scouler's catchfly	2B.2	Coastal bluff scrub, Coastal prairie, Valley and foothill grassland (Mar-May)Jun-Aug(Sep)
Microseris paludosa	marsh microseris	1B.2	Closed-cone coniferous forest, Cismontane woodland, Coastal scrub, Valley and foothill grassland Apr-Jun(Jul)
Stebbinsoseris decipiens	Santa Cruz microseris	1B.2	Broadleafed upland forest, Closed-cone coniferous forest, Chaparral, Coastal prairie, Coastal scrub, Valley and foothill grassland Apr-May
Orthotrichum kellmanii	Kellman's bristle moss	1B.2	Chaparral, Cismontane woodland Jan-Feb
Lasthenia californica ssp. macrantha	perennial goldfields	1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub Jan-Nov
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	1B.2	Chaparral, Coastal prairie, Coastal scrub Mar-Jun
Plagiobothrys diffusus	San Francisco popcornflower	1B.1/ CE	Coastal prairie, Valley and foothill grassland Mar-Jun
Limnanthes douglasii ssp. sulphurea	Point Reyes meadowfoam	1B.2/ CE	Coastal prairie, Meadows and seeps (mesic), Marshes and swamps (freshwater), Vernal pools Mar-May
Agrostis blasdalei	Blasdale's bent grass	1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie May-Jul
Eriophyllum latilobum	San Mateo woolly sunflower	1B.1/ FE/ CE	Cismontane woodland (often serpentinite, on roadcuts), Coastal scrub, Lower montane coniferous forest May-Jun
Arctostaphylos andersonii	Anderson's manzanita	1B.2	Broadleafed upland forest, Chaparral, North Coast coniferous forest Nov-May
Hesperocyparis abramsiana var. butanoensis	Butano Ridge cypress	1B.2/ FT/ CE	Closed-cone coniferous forest, Chaparral, Lower montane coniferous forest Oct

Table 2. Plants Observed within the Project Area

Scientific Name	Common Name	Status
Acer macrophyllum	big leaf maple	
Achellia millefolium	yarrow	
Adenocaulon bicolor	trail plant	
Anisocarpus madioides	woodland madia	
Anthoxanthum occidentale	California sweet grass	
Aralia californica	elkclover	
Arbutus menziesii	madrone	
Baccharis pilularis	coyote brush	
Bellis perennia	**lawn daisy**	
Bromus laevipes	narrow flowered brome	
Bromus sp.	brome	
Bromus vulgaris	common brome	
Cardamine californica	milkmaids	
Cardamine oligosperma	bitter cress	
Carduus pycnocephalus	**Italian thistle**	**Cal-IPC Moderate**
Carex sp	sedge	
Ceanothus thrysiflorus	blue blossom	
Cerastium viscosum	**mousear chickweed**	
Circium vulgare	**bullthistle**	**Cal-IPC Moderate**
Clinopodium douglasii	yerba buena	
Clintonia andrewsiana	red clintonia	
Collomia heterophylla	varied leaved collomia	
Cortaderia jubata	**jubata grass**	**Cal-IPC High**
Corylus cornuta	hazelnut	
Cynoglossum occidentale	houndstongue	
Cystopteris fragilis	brittle fern	
Deshampsia elongata	slender hairgrass	
Diplacus aurantiacus	monkey flower	
Dryopteris arguta	wood fern	
Ehrharta erecta	**panic veldtgrass**	**Cal-IPC Moderate**
Epilobium ciliatum	willow herb	
Epipactis helleborine	**helleborine**	
Equisetum arvense	comon horsetail	
Erigeron canadensis	Canada horseweed	
Festuca myuros	**sixweeks fescue**	
Fragaria vesca	wood strawberry	
Frangula californica	coffee berry	
Galium aparine	common bedstraw	
Galium californicum	California bedstraw	

Scientific Name	Common Name	Status
Gallium sp.	bedstraw	
Gamochaeta ustulata	featherweed	
Genista monspessulana	**French broom**	**Cal-IPC High**
Geranium dissectum	**wild geranium**	
Geranium molle	**Crane's bill geranium**	
Hedera helix	**English ivy**	**Cal-IPC High**
Heteromeles arbutifolia	toyon	
Hieracium albiflorum	white flowered hawkweed	
Holcus lanatus	**velvet grass**	**Cal-IPC Moderate**
Holodiscus discolor	ocean spray	
Hypericum androsaemum	sweet amber	
Hypochaeris radicata	**hairy cats ear**	
Iris douglasiana	Douglas iris	
Juncus balticus	Baltic rush	
Juncus patens	rush	
Lactuca serriola	**prickly lettuce**	
Lathyrus vestitus	common pacific pea	
Lonicera hispidula	pink honeysuckle	
Lysimachia latifolia	Pacific Star	
Maianthemum racemosum	feathery false lily of the valley	
Marah sp.	man-root	
Melica torreyana	Torrey's melica	
Myosotis latifolia	**forget me not**	
Nemophila parviflora	small flowered nemophila	
Notholithocarpus densiflorus	tanoak	
Osmorhiza berteroi	sweet cicely	
Oxalis oregana	redwood sorrel	
Pentagramma triangularis	goldenback fern	
Plantago coronopus	cut leaf plantain	
Plantago lanceolata	**English plantain**	
Polygala californica	milkwort	
Polypodium calirhiza	licorice fern	
Polypodium glyrrhiza	licorice fern	
Polystichum munitum	Western sword fern	
Prosartes hookeri	Hooker's fairy bells	
Pseudotsuga menziesii	Douglas fir	
Pteridium aquilinum	Western bracken fern	
Quercus parvula var. shrevei	Shreve oak	
Ranunculus hebecarpus	pubescent fruited buttercup	
Rosa gymnocarpa	wood rose	

Scientific Name	Common Name	Status
Rubus parviflorus	thimbleberry	
Rubus ursinus	California blackberry	
Rumex crispus	**curly dock**	
Salix lasiolepis	arroyo willow	
Sanicula crassicaulis	Pacific sanicle	
Sanicula laciniata	coast sanicle	
Scrophularia californica	bee plant	
Senecio minimus	coastal burnweed	
Sequoia sempervirens	coast redwood	
Sonchus oleraceus	**sow thistle**	
Stachys bullata	California hedge nettle	
Symphoricarpos mollis	creeping snowverry	
Taraxacum officinale	**dandelion**	
Torreya californica	California nutmeg	
Toxicodendron diversilobum	poison oak	
Toxicoscordion fremontii	Fremont's star lily	
Trifolium campestre	**hop clover**	
Trifolium gracilentum	pin point clover	
Trifolium subterraneum	**subterranean clover**	
Trillium ovatum	Western wakerobin	
Umbellularia californica	California bay	
Vaccinium ovatum	evergreen huckleberry	
Vicia americana	American vetch	
Viola sempervirens	redwood violet	
Whipplea modesta	modesty	
Woodwardia finbriata	Western chain fern	


Girl Scouts of Northern California, Camp Butano Creek - Treatment Areas
San Mateo County, Pescadero, USGS 7.5' Quadrangle. Franklin Point, T8S, R4W, MDBM, Portion of the Northwest 1/4 of Section 20
Butano Creek
Girl Scout Creek
Canyon Rd to Cloverdale Rd
Legend
Equipment Access
Staging Areas
Seasonal Roads
Canyon Road
Property Boundary
Treatment Areas - 44.3 acres
Handwork - 5.4 acres
Mechanical - 32.2 acres
Road Mastication - 6.7 acres
Class I Stream
Class II Stream
Class III Stream
40 Foot Contours
N
W
E
S
0 150 300 600 900 1,200
Feet
SCALE 1:5000
SK 4/30/21
ARC
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Attachment F

CDFW Memorandum – Marbled Murrelets

(Please see the following pages)

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 20, 2021

Ms. Sheena Sidhu, Conservation Program Manager
San Mateo Resource Conservation District
80 Stone Pine Road, Suite 100
Half Moon Bay, California 94019
Sheena@sanmateorcd.org

Ms. Lisa Lurie, Executive Director
Resource Conservation District of Santa Cruz County
820 Bay Avenue, Suite 136
Capitola, California 95010
Llurie@rcdsantacruz.org

Subject: Marbled Murrelet Pre-Consultation for the California Department of Forestry and Fire Protection Forest Health Grant Project at Camp Butano Creek and Camp Skylark Ranch, Butano Creek, Gazos Creek, and Cascade Creek Watersheds, San Mateo and Santa Cruz Counties

Dear Ms. Sidhu and Ms. Lurie:

This letter responds to a request from the San Mateo Resource Conservation District and the Resource Conservation District of Santa Cruz County (RCDs) for a marbled murrelet (*Brachyramphus marmoratus*) consultation with the California Department of Fish and Wildlife (CDFW) for two California Department of Forestry and Fire Protection (CAL FIRE) Forest Health Grants Fuel Reduction projects in San Mateo and Santa Cruz counties.

The marbled murrelet is listed as state endangered pursuant to Fish and Game Code 2050 *et seq.*, federally threatened pursuant to Title 16, United States Code 1531 *et seq.*, and is a sensitive species as defined by Title 14, California Code of Regulations (14 CCR) § 895.1. As trustee for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species. The purpose of the consultation is to determine if the fuel reduction projects have the potential to take[1] or adversely affect the marbled murrelet.

The marbled murrelet is a small seabird, which, in California, uses coastal coniferous forests from Del Norte to Santa Cruz counties during the breeding season (March 24 to September 15). Marbled murrelets have been documented nesting in mature, old-

[1] Pursuant to Fish and Game Code section 86, "'take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

growth forests as well as younger forest stands with late-seral elements such as large trees with moss-covered limbs >6 inches wide or limb defects (McShane *et al.* 2004). Mature conifer stands often have a complex tree crown structure with gaps in the canopy that allow access by adult murrelets to and from nest platforms during parental incubation exchanges and chick feeding (Ralph *et al.* 1995).

Project Location

The forest fuel reduction projects are located at two properties owned and operated by the Girl Scouts of Northern California. Camp Butano Creek (Figure 1) is located approximately 4.25 air miles from the Pacific Ocean in San Mateo County (Section 20, T8S, R4W, MDB&M, USGS 7.5" Quad Franklin Point). The 143-acre property is a yearly summer residential camp outside the town of Pescadero near Butano State Park in the Butano Creek Watershed. Butano Creek runs along portions of the western property boundary. Camp Skylark Ranch (Figure 1) is located approximately 3 air miles from the Pacific Ocean in Santa Cruz County (Sections 4 & 9, T9S, R4W, MDB&M, USGS 7.5" Quad Franklin Point). The 264-acre property is also a yearly summer residential camp adjacent to both Cascade Ranch and Big Basin State Parks. While approximately one third of the property to the north is within the Gazos Creek Watershed, it only contains a small portion of the project area. Most of the property and project areas are to the south within the Cascade Creek Watershed. A small portion of Whitehouse Creek runs through the southwestern corner of the property boundary.

Project Description

The purpose of the CAL FIRE Forest Health Grant Program is to fund active restoration and reforestation activities aimed at providing more resilient and sustained forests in California. The funded project activities at Camp Butano Creek and Camp Skylark Ranch include forest fuel reduction activities aimed at reducing the risk of wildfire impacts and severity within the property. The Forest Health Grant has been awarded to the RCDs for approximately 10 years during which fuel reduction activities may be conducted prior to 2030. Both project locations consist of scattered old-growth and second-growth coast redwood and Douglas-fir forest stands.

General treatments at both project locations will consist of reducing ladder fuels in the understory of stems up to approximately 12 inches in diameter with masticators on slopes less than 40%, the removal of larger tanoaks that are considered dead or dying because of Sudden Oak Death, and possible handwork in some areas within proximity to camp infrastructure. No operations in the Watercourse and Lake Protection Zones (WLPZ) or on unstable areas are proposed. The project will use existing road infrastructure with no road construction needed.

On August 16, 2020, the CZU Lighting Complex Wildfire started and burned across the Santa Cruz Mountains. Both project areas are within the wildfire boundary with soil burn severity ranging from low to high (Figure 2). The entire Camp Skylark Ranch property burned, with high severity occurring in several areas. As a result, the removal of larger diameter hardwoods and Douglas-fir hazard trees will occur around areas and infrastructure that campers frequent. Camp Butano Creek burned with a low severity with much of the understory remaining brown with little green vegetation and the overstory remaining intact with live crowns.

Other than the removal of hazard trees around camp infrastructure, fuel reduction treatments will remain the same for both project locations. However, the locations of fuel reduction activities may change because of post wildfire forest stand conditions.

Marbled Murrelets in the Butano Creek, Gazos Creek & Cascade Creek Watersheds

Marbled murrelets are well documented within the Butano Creek and Gazos Creek Watersheds. Both Butano and Gazos Creeks are known flyways for murrelets traveling from the ocean to inland nesting habitat. Whitehouse Creek is likely a murrelet flyway as well. Critical habitat for the marbled murrelet, as designated by the U.S. Fish and Wildlife Service (USFWS 2011) can be found within the Butano, Cascade Ranch and Big Basin State Parks, all of which are located adjacent to the project locations.

Murrelets have been detected and both suitable and occupied habitat is documented throughout these watersheds from past studies and surveys with both presence and occupied[2] behavior observed. CDFW has also documented suitable marbled murrelet nesting habitat during consultations for timber harvest plans and other projects in these watersheds (Figure 3).

In the Butano Creek watershed, a ten-year monitoring study, from 1992-2001, was conducted throughout the South Fork Butano Creek on private timberland and in Butano State Park. Murrelet occurrences were profoundly documented, including nesting behavior, predation, and the observation of eggshells and grounded juveniles (Suddjian 2003). The monitoring study also included the Butano Falls Conservation Easement, which documents late seral coast redwood habitat suitable for nesting marbled murrelets adjacent to the Camp Butano Creek property.

In the Cascade Creek watershed, suitable and occupied murrelet habitat has been documented in the headwaters of Whitehouse Creek, adjacent to Big Basin State Park

[2] Presence detections refer to a site where murrelets are heard or observed flying above the forest canopy, while occupied detections refer to sites where murrelets are observed exhibiting sub-canopy behaviors (i.e., flying below, thru, into or out of forest canopy) which indicate that the site has importance for breeding or social behaviors (Evans Mack 2003). CDFW's Marbled Murrelet Survey Protocol Guidelines state that once a site has been determined to be occupied by murrelets, it shall be considered occupied indefinitely (CDFW 2003).

and upstream of the Camp Skylark Ranch property. And in the Gazos Creek watershed suitable and occupied murrelet habitat has been documented throughout the watershed from many CDFW consultations and landowner surveys conducted on private timberland.

A summary of past CDFW marbled murrelet consultations within the Butano Creek, Gazos Creek and Cascade Creek watersheds are summarized in Appendix A.

Marbled Murrelet Habitat Assessment of the Project Areas

On August 10, 2020, CDFW Senior Environmental Scientist Robynn Swan accompanied Steve Auten, Registered Professional Forester (RPF), Shelby Kranich with Auten Resource Consulting, and Matt Abernathy with the Santa Cruz County RCD on a site visit and conducted a habitat assessment within the project areas to determine if fuel reduction activities will have an impact on the marbled murrelet. During the site visit, trees and stand characteristics were assessed for habitat features meeting the definition of "suitable habitat", as outlined in the Pacific Seabird Group's "Methods for Surveying Marbled Murrelets in Forests" ("survey protocol", Evans Mack 2003).

Camp Skylark Ranch

The fuel reduction treatment areas observed at Camp Skylark Ranch consisted of a predominately second growth conifer forest dominated by coast redwood and Douglas-fir with scattered old growth coast redwoods. During the site visit, two non-contiguous large diameter coast redwood trees were observed supporting platforms suitable for murrelet nesting.

One tree was located at the bend of an existing seasonal road that meanders through the northern portion of the campground. The tree was observed with at least one large diameter limb suitable to support a nest within a stand that contained a moderate canopy with few adjacent screen trees to provide lateral and foliar coverage to the platform.

The other tree was located in the Outpost camping area several feet away from camping infrastructure that included toilets, campfire circles and picnic tables. This tree was also observed with at least one large diameter limb suitable to support a nest within a stand that contained a moderately closed canopy with adjacent screen trees to provide lateral and foliar coverage to the platform.

Although both trees observed at Camp Skylark Ranch contained suitable nesting structures, potential for use by marbled murrelets is unlikely due to the proximity to a seasonal road and a campground that are actively used during the nesting season. The project areas operate every summer with 200+ youth campers and staff that participate

in various activities throughout the property that may be a visual and auditory disturbance and deterrent to nesting murrelets. Therefore, CDFW determined that the fuel reduction treatment areas at Camp Skylark Ranch do not contain suitable marbled murrelet nesting habitat at this time.

Camp Butano Creek

The fuel reduction treatment areas observed at Camp Butano Creek also consisted of a predominately second-growth conifer forest dominated by coast redwood and Douglas-fir with scattered old-growth coast redwoods. Although large diameter residual conifers were present with a moderately closed canopy, none of the trees observed had large nesting platforms suitable for marbled murrelets. Based on the lack of trees with large suitable nesting platforms, CDFW determined that the fuel reduction treatment areas at Camp Butano Creek do not contain suitable marbled murrelet nesting habitat at this time.

Additionally, Camp Butano Creek also operates every summer with activities that may also be a visual and auditory disturbance and deterrent to nesting murrelets similar to the conditions at Camp Skylark Ranch. Both properties are also adjacent to State Parks with known suitable old growth habitat occupied by nesting marbled murrelets every year.

The habitat assessment observations were made days prior to the CZU Lighting Complex Wildfire burning through the properties. Following the wildfire, CDFW consulted with the project RPF on the current post-fire habitat conditions of the fuel reduction treatment areas. Based on post fire stand conditions, CDFW's habitat determination remains the same.

Wildlife Tree Retention

Although the project areas do not support suitable marbled murrelet nesting habitat at this time, the project area habitat elements could provide such habitat in the future as the forest regenerates. Large diameter mature trees are often part of a highly fragmented landscape. Retention of these legacy trees maintain and promote the development of structural complexities that provide nesting, shelter, and foraging habitat to a variety of wildlife species (Mazurek and Zielinski 2004).

CDFW recommends that any residual conifers with large limbs and other habitat values be retained as wildlife trees to promote and recruit future special habitat elements. CDFW also recommends the protection of any screen trees and overlapping canopy trees if they are likely to provide future protection to habitat by reducing wind, providing shade to potential nest sites, and reducing exposure to nest predators.

Corvid Predation

CDFW recommends that measures be taken within the project areas and throughout the property to avoid attracting predators of murrelets as result of project activities. Ravens, crows, and jays, which have large home ranges, are known predators of marbled murrelet eggs and nestlings (Marzluff and Neatherlin 2006). CDFW recommends that all garbage and food scraps be packed out and disposed of in animal-proof containers. All efforts should be made to keep project areas devoid of any material which could potentially attract known murrelet predators.

Recommendations

Based on observations during the habitat assessment, CDFW has determined that the fuel reduction treatment areas at Camp Butano Creek and Camp Skylark Ranch do not support suitable marbled murrelet nesting habitat at this time. Habitat deemed unsuitable for marbled murrelet nesting may develop into suitable habitat over time; therefore, habitats inspected by CDFW during consultations and determined to be not suitable at the time of the consultation are subject to re-evaluation after a period of five (5) years. CDFW recommends that the following measures be incorporated into the fuel reduction treatment project:

1. Following the first five years of forest fuel reduction activities, CDFW shall be contacted and consulted for re-evaluation of habitat suitability for the marbled murrelet.

2. Within the fuel reduction treatment areas, any non-hazardous trees that do not require removal and exhibit canopy deformities or large diameter limbs that provide relatively flat potential nesting platforms shall be retained as wildlife trees. Where feasible, screen trees and overlapping canopy trees shall be retained to provide protection from wind and predators.

3. Prior to fuel reduction treatment activities, the location of retained wildlife trees shall be conveyed to crew members to ensure that the identified wildlife habitat is not impacted during hazard tree removal activities. Nearby harvested trees shall be directionally felled away to avoid damage to these retained trees.

4. To avoid attracting predators of marbled murrelets, all garbage and food scraps shall be packed out and disposed of in animal-proof containers and transport off-site daily.

Consultation with CDFW is recommended if the location and boundary lines of the project area are modified, or if CDFW receives any new information regarding marbled murrelet occurrences near the project locations. CDFW's evaluation and

recommendations are consistent with recovery objectives and goals of the Marbled Murrelet Recovery Plan (USFWS 1997).

If you have questions or comments, please contact Ms. Robynn Swan, Senior Environmental Scientist (Specialist), at (707) 210-4467 or Robynn.Swan@wildlife.ca.gov; or Mr. Craig J. Weightman, Environmental Program Manager, at (707) 339-1332 or Craig.Weightman@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Gregg Erickson
Gregg Erickson
Regional Manager
Bay Delta Region

cc: David Cowman: David@sanmateorcd.org
Daniel Nylen: dnylen@rcdsantacruz.org
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Steve Auten: steve.auten.arc@gmail.com

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Appendix A. CDFW Marbled Murrelet Consultations within the Butano Creek, Gazos Creek & Cascade Creek Watersheds.

The table is a summary of CDFW Marbled Murrelet consultations for timber harvest plans (THPs) and projects within the Butano Creek, Gazos Creek & Cascade Creek watersheds. This information includes the status of murrelet occupancy within the stand determined at the time of the consultation.

Butano Creek Watershed

Project/Timber Harvest Plan	*Habitat Stand Name & Status*	*CDFW Consultation*
1-04-154 SMO; Leroy's Draw	Leroy's Draw – Suitable habitat.	Consultation letter dated August 25, 2004, CDFW PHI report dated August 5, 2004.
1-08-044 SMO; Sinnott	Sinnott - Presence/Occupied. Habitat surveyed in 2005/2006 with murrelet presence and occupancy detected.	Consultation letter dated March 7, 2008.
1-10-080 SMO; Silver Bullet	Silver Bullet – Suitable habitat.	Consultation letter dated December 21, 2009.
1-14-031 SMO; Camp Minke	Camp Minke – Suitable habitat.	Consultation letter dated December 21, 2009.
1-12NTMP-003 SMO/SCR; BCCC Scouts	Cutter Scout – Suitable habitat.	Consultation letter dated July 16, 2012.
1-16-132 SMO; Gazos North Fork	Habitat Areas 1 & 2 – Suitable habitat.	Consultation letter dated February 17, 2015.
1-02-201 SMO; Redtree-Butano	Butano Creek – Occupied. Habitat surveyed in 1999/2000 with murrelet occupancy detected.	Consultation letter dated June 12, 2002.
South Fork Butano Creek	Units A, B, C & D - Occupied. Habitat surveyed from 1992 – 2001 with murrelet occupancy detected.	10 Year Monitoring Report by David Suddjian, June 2003.
Butano Falls Conservation Easement	Occupied. Habitat surveyed from 1992 – 2001 with murrelet occupancy detected.	10 Year Monitoring Report by David Suddjian, June 2003.

Girl Scout Creek	Occupied. Habitat surveyed in July 2002 with murrelet occupancy detected.	Marbled Murrelet Survey Report by Bryan Mori, Sept. 20, 2002.

Gazos Creek Watershed

Project/Timber Harvest Plan	*Habitat Stand Name & Status*	*CDFW Consultation*
1-11-064 SMO; Hammond	Habitat Area 1, 2 & 3 – Suitable habitat. Cascade Creek State Park habitat adjacent to THP – Occupied.	Consultation letter dated July 21, 2011.
Gazos Mountain Camp	Slate Creek, Gazos Mountain Camp, Middle Fork Gazos – Occupied. Habitat surveyed in 1999/2000 and for 1-06-127 SMO with murrelet occupancy detected.	Consultation letter dated November 2, 2005.
Ainsley Tree Farm	North Fork Gazos Creek/Ainsley South – Presence. Habitat surveyed in 2009/2010 with above canopy murrelet detections.	Consultation letter dated December 22, 2009.
1-13-017 SMO; Gazos Middle Fork	Habitat Area 4/Unit A, Habitat Area 6/Unit F, Habitat Area 1/Unit D, Habitat Area 2/Unit C, Habitat Area 3/Unit B, Habitat Area 4/Unit A – Presence. Habitat surveyed in 2011/2012 with above canopy murrelet detections.	Consultation letter dated May 2, 2013.
1-07-147 SMO; Gazos 5	Gazos 5 – Presence. Habitat surveyed in 2006/2007 with above canopy murrelet detections. North Fork Gazos Creek Habitat – Occupied. Habitat surveyed in 2004/2005 with murrelet occupancy detected. Bryan's Grove –	Consultation letter dated January 11, 2008.

	Occupied. Habitat surveyed in 1997, 1999, 2000 & 2002 with murrelet occupancy detected.	
1-06-127 SMO; Ainsley Forest LLC	Hicks Tree Farm – Presence. Habitat surveyed in 2004/2005 with above canopy murrelet detections. North Fork Gazos Creek-Ainsley – Occupied. Habitat surveyed in 2004/2005 with murrelet occupancy detected.	Consultation letters dated November 2, 2005.

Cascade Creek Watershed

Project/Timber Harvest Plan	*Habitat Stand Name & Status*	*CDFW Consultation*
1-07-143 SCR; Whitehouse THP	Whitehouse Creek – Occupied. Habitat surveyed in 2007 with murrelet occupancy detected.	CDFW consultation letter dated February 4, 2008.

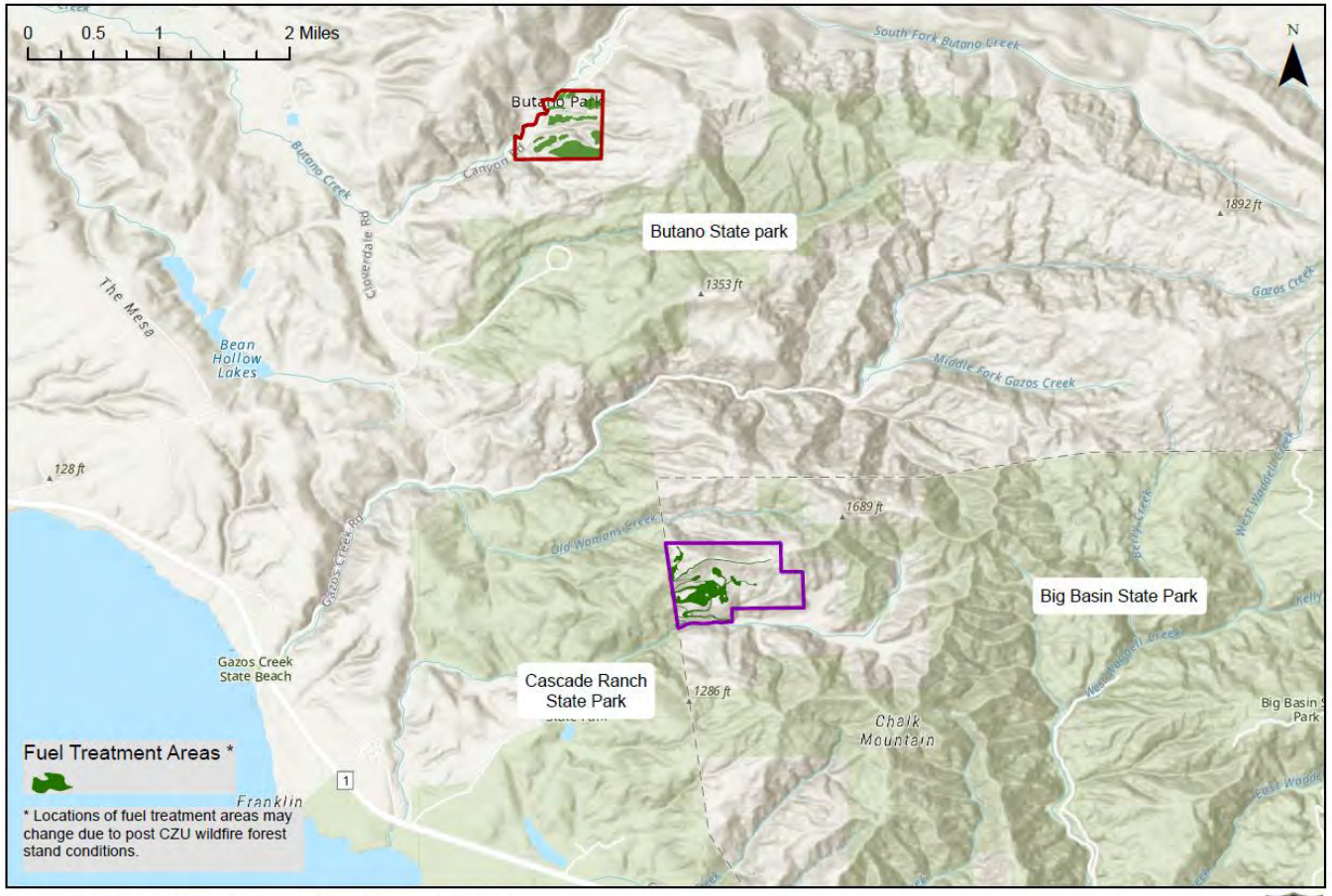

Figure 1. General location of the CAL FIRE Forest Health Grants Fuel Reduction projects in San Mateo and Santa Cruz Counties.

Camp Butano Creek
Camp Skylark Ranch

Source: CDFW MAMU Database
April, 2021

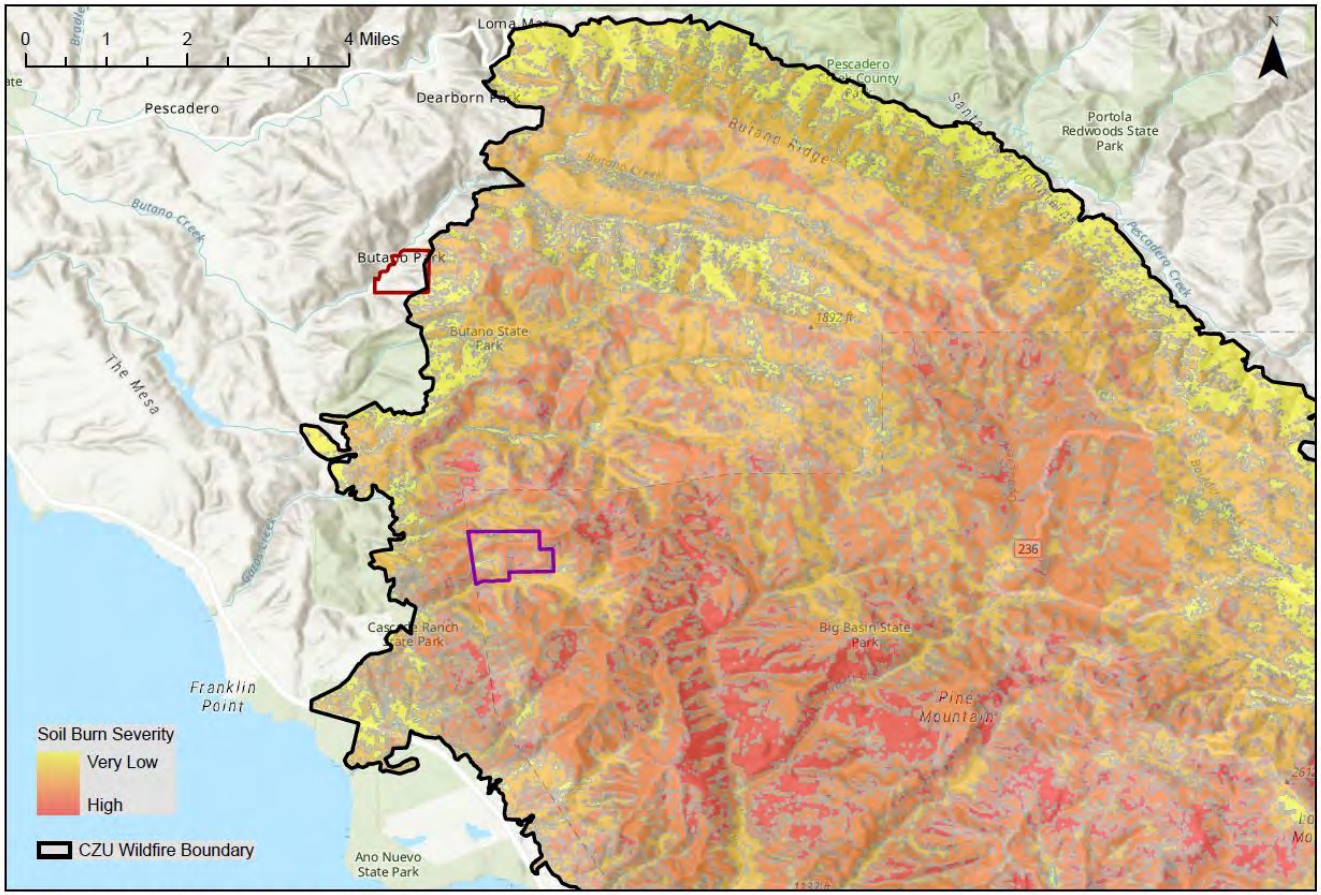

Figure 2. CZU Lighting Complex Wildfire Soil Burn Severity

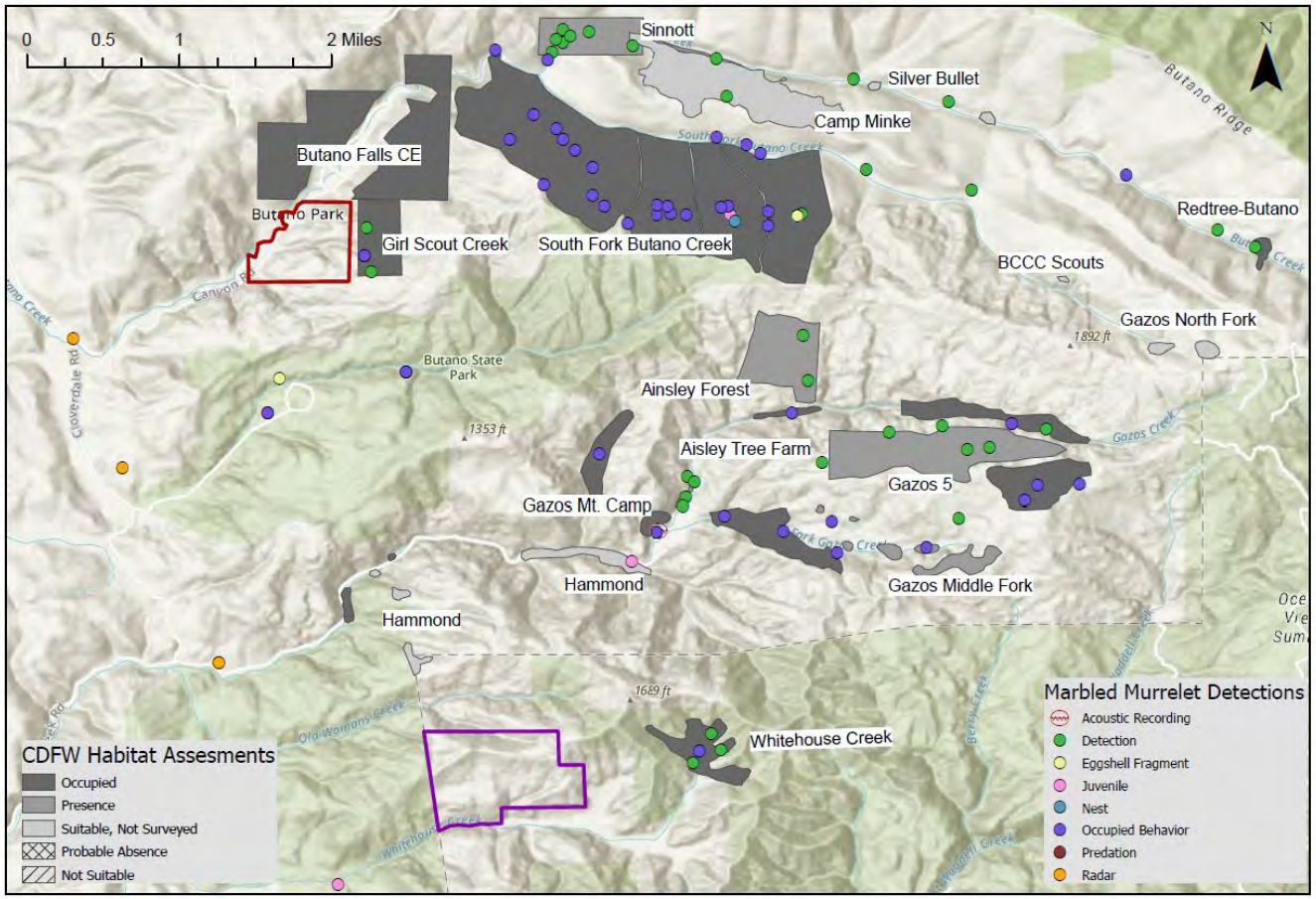

Figure 3. CDFW known marbled murrelet habitat and detections within the Butano Creek, Gazos Creek and Whitehouse Creek watersheds.

Camp Butano Creek
Camp Skylark Ranch

Source: CDFW MAMU Database
April, 2021

Attachment G

Coastal Vegetation Treatment Standards Document

(Please see the following pages)

Coastal Vegetation Treatments Standards

Girl Scouts of Northern California - Camp Butano Forest Health Project

1. All projects shall comply with and carry out the requirements of the CalVTP PEIR, including use of approved treatment methods, treatment activities and all applicable standard project requirements (SPRs).

2. Project-Specific Analyses (PSAs) shall be submitted to the Executive Director of the California Coastal Commission (CCC) for review and approval for the purpose of coastal development authorization prior to conducting projects. Coordination between the project proponent and CCC shall occur as early as feasible in the design process in order to avoid delays related to Coastal Act consistency.

3. PSAs shall include clear problem and goal statements (i.e., overall project goals, fire prevention goals, ecological goals, etc.) associated with each project proposed pursuant to this [master permit or public works plan]. These statements are intended to assist project proponents and CCC in developing mutual understanding of the potential impacts and benefits – both short and long term – for each project. It is expected that this information will be incorporated into item #6 of each PSA.

   Problem Statement:
   Forested landscapes across the Santa Cruz Mountains are undergoing significant change. The climate is becoming warmer and drier, endemic species are at risk, and sudden oak death has taken an immeasurable toll on regional ecosystems and overall forest health. At the same time, drier site conifer species are displacing hardwoods and other sensitive plant species, reducing biodiversity and affecting the suitability of these habitats for rare and special-status wildlife. Altered fire regimes and increased fuel loads are driving larger and more catastrophic wildfire. The result has generated damaging changes to ecosystems that require environmentally sensitive landscape-level treatments to redirect the path of changing climates and ecological conditions impacting the Santa Cruz Mountains and surrounding communities.

   Most notably for San Mateo and Santa Cruz County in 2020, the CZU Lightning Complex burned 86,509 acres, destroyed 1490 buildings, and exhibited extreme fire behavior. Initial estimates suggest that over 50% of the impacted area burned at high fire severities. Many forested stands that were topographically exposed to the extreme fire weather resulted in significant tree mortality and habitat losses that will take decades to recover.

   Goal Statement:
   This project supports the intent of the Forest Health Program goals, California's climate goals, and the goals of the California Coastal Commission for Environmentally Sensitive Habitat Areas (ESHA) where ecological restoration treatment types may occur to:

   - *Proactively restore forest health, improve ecosystem resiliency, and conserve working forests by conducting ecologically minded forest health treatments.*
   - *Protect state water supply sources by strategically implementing ecological restoration projects across priority watersheds.*
   - *Encourage the long-term storage of carbon in forest trees and soils through the reduction of dense understory thus promoting larger healthier stands of mature trees.*
   - *Minimize the loss of forest carbon from large, intense wildfires, through reduction of ladder fuels and brush resulting from years of fire suppression.*
   - *Promote public safety, health, and welfare and protect public and private property through the implementation of ecologically restorative fuel reduction treatments in the wildland urban interface.*

   The Girls Scouts of Northern California Camp Butano Creek redwood forest still holds ecologically resilient characteristics from the past with scattered old growth trees and remnants of a time when the understory was

more diverse. The lack of fire, until recently, coupled with changing climates has left the majority of the property with severely overstocked in the understory and mid-range diameter class of trees.

The recent CZU burned at such a low severity on Camp Butano Creek that it killed much of the understory but did not consume it (i.e. turn to ash), now priming the area for a more extreme fire event. Treatment of this dead understory material to approximately 8 inches in diameter, and additional retreatments in the years to come can reduce the severity of future wildfire events and maintain the vegetation "membership rules"[2] for redwood in this area.

Ecologically restorative outcomes expected from this project will release a more vigorous and diverse understory once the sunlight is allowed to penetrate the forest floor again. In addition, the forest growth that had been attributed to 300 – 400 stems per acre will ~~now~~ be adjusted~~attributed~~ to approximately 200 stems per acre of mid-range and larger diameter trees. Remaining trees will extend their heights and expand their crowns, becoming more vigorous and able to resist vegetation pattern transformations in the face of climate change while reducing the continuity of hazardous ladder fuels to the canopy.

4. In the coastal zone, vegetation treatment projects fall into two categories: (1) Forest Health projects (i.e., Ecosystem Restoration) and (2) Fire Prevention projects (i.e., Fuel Breaks and Wildland Urban Interface). The purpose of forest health projects is to restore and enhance ecosystems, including to prevent fire behavior to which the ecosystem is not adapted. The ecosystems that can be treated under this category include forested ecosystems as well as other ecosystems such as woodland and scrub dominated systems. The purpose of fire prevention projects is to protect existing structures and infrastructure, including access roads. Fire prevention projects shall be limited to the applicable defensible space requirement (which is typically 100 feet, but can range to as much as 300 feet under specific circumstances), unless accompanied by a clear rationale, provided by a qualified professional, as to why additional defensible space is required to protect existing structures and infrastructure.

   Camp Butano Creek is surrounded predominantly by redwood forest and falls under the California Vegetation Treatment Program (CalVTP) Project Specific Analysis (PSA) designation to conduct ecological restoration and Wildland-urban Interface fuel reduction treatments. The treatments proposed are an interconnectable mosaic pattern of treatment areas that, with ecologically sensitive treatments, focus on:

   - *Increasing the health and vigor of the forest by conducting understory thinning through mastication of predominantly tanoak and small redwood trees up to ~8 inches in diameter.*
   - *Removing dead and dying trees predominantly resulting from sudden oak death and low fire severity from the CZU.*
   - *Control of invasive species such as French broom.*
   - *Restoration of historic vegetation patterns where Douglas-fir encroachment has changed the fuel regime and is actively converting sensitive forest systems and Environmentally Sensitive Habitat Areas (ESHA).*
   - *Additionally, treatments address broad scale forest health and ecosystem resilience factors, including habitat connectivity, water quality/quantity, carbon sequestration, and maintenance of rare species habitats by reducing competition and allowing the residual stand of larger trees and vegetative understory to grow in a more vigorous and resilient manner, better representing a time when fire occurred more frequently and at lower severities.*

5. In the coastal zone, environmentally sensitive habitat area (ESHA) is defined as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and that could be easily disturbed or degraded by human activities and developments (see

[2] Requirements to maintain membership rules at an alliance level under the 2nd edition of the Manual of California Vegetation for redwoods

Coastal Act Section 30107.5). Rarity determinations for habitats and species are made by CDFW, USFWS, and CNPS, and are used to support a CCC ESHA determination.[3] In addition, an ESHA determination may be made on the basis of an area constituting 'especially valuable habitat' where it is of a special nature and/or serves a special role in the ecosystem, such as providing a pristine example of a habitat type or supporting important ecological linkages. The Coastal Act requires that ESHA be protected against any significant disruption of habitat values and only allows uses dependent on the ESHA resources within those areas (see Coastal Act Section 30240). It is anticipated that many of the Forest Health and Fire Prevention activities pursued within the coastal zones of these two counties will take place within natural communities that qualify as ESHA (e.g., Redwood forest, Monterey Pine forest, Douglas Fir/Tan Oak forest, etc.).

All of the Coastal Zone has been identified as ESHA in San Mateo County by the Coastal Commission. As such, the basis of this project is to conduct ecologically restorative treatments that promote the persistence and resiliency of the redwood forest type as an environmentally sensitive habitat area through a myriad of protection, resource conservation, and avoidance measures outlined in the CalVTP Camp Butano Creek PSA.

6. In addition to the requirements of the CalVTP PEIR, the following standards shall also be met in the coastal zone:

   - Protect Ecosystem. Forest Health projects shall: (a) proactively restore and enhance ecosystems and forests, protect watersheds, and promote long-term storage of carbon, including through the minimization of forest carbon loss from large and intense wildfires; (b) restore and maintain vegetation cover to a threshold that reflects appropriate fire frequencies (i.e., fire-return intervals) on the landscape, considering estimated pre-European settlement conditions as well as future climate change, and the maintenance or improvement of ecosystem health; (c) maintain vegetation cover and composition to comply with the standards (membership rules) set forth in the second edition of the Manual of California Vegetation (MCV2) to avoid unintended habitat conversion;[4] and (d) provide for a mosaic of appropriate native plants by age, size, and class that support the overall habitat. Fire Prevention projects shall meet all of the above requirements to the maximum extent feasible, while achieving overall project goals and necessary fire prevention goals, and any deviations shall be clearly explained and identified in the PSA.

     The Camp Butano Creek Project is under a CAL FIRE – California Climate Investment Grant project that shows a positive carbon benefit through the resulting and required carbon analysis suggesting that approximately 13,652 MT CO2e (Metric Tons of Carbon Dioxide Equivalent) will be sequestered over the 60-year modeling period.
     This carbon analysis evaluated the amount of carbon sequestered comparatively between two different scenarios:
     - *Scenario 1: The difference in carbon stored by not conducting the understory thinning and conducting the understory thinning.*

[3] CDFW defines natural communities, animals, and plants with a global or state ranking of 1, 2, or 3 as rare and the CCC typically finds these to be ESHA. CCC also typically considers plant and animal species listed by the federal and state endangered species acts (ESA and CESA, respectively) and/or identified under other special status categories (e.g., California Species of Special Concern) and/or identified by the California Native Plant Society (CNPS) as '1B' and '2' plant species as constituting ESHA.

[4] Membership rules are quantitative definitions used to assign field samples to vegetation types based on data analysis and can include species constancy, cover values, and the presence of indicator species.

- *Scenario 2: The difference in carbon stored by not conducting the understory thinning and having the treatment area burn and then conducting the understory thinning and having the treatment area burn.*
- *The results of Scenario 1 and 2 are added together to show either a positive or negative correlation between treatments and carbon sequestered. In this case the outcome was positive for carbon storage.*
- *Generally, required modeling parameters suggest a benefit to most ecologically restorative treatments that focus on an understory thinning up to 12 inches in diameter for most forest types in the Santa Cruz Mountains utilizing local forest inventory[5] and the Forest Vegetation Simulator[6].*

Please refer to the CalVTP PSA for specifications that protect ecosystems. A summary is provided below:

- *A full flora and fauna assessment and field survey was conducted to avoid impacts to sensitive communities, habitats, and resources.*
- *A Confidential Archaeological Addendum was completed for Camp Butano Creek including noticing to the Native American Heritage Commission.*
- *A full analysis of vegetation types was conducted to determine what the major habitat types are and what major alliances shall be maintained.*
- *A pre-operational meeting shall be conducted with the contractor to discuss project implementation, special protection measures and any potential operational constraints regarding the conduct of this project that may impact sensitive resources.*
- *The project will notify neighbors through posting 1-3 days before operations begin at a conspicuous location on the property fronting a public road and neighbors within 1500 feet will be notified by mail.*
- *No heavy equipment operations shall occur within a Watercourse and Lake Protection Zone (WLPZ) or a Class III Equipment Exclusion Zone. Equipment may travel through a WLPZ or Class III over existing crossings.*
- *No heavy equipment operations on slopes greater than 50%. Mastication equipment may reach from an existing road to treat areas on slopes greater than 50%.*
- *No equipment operations on unstable areas.*
- *Handwork may be conducted in watercourse and lake protection zones or wet areas and shall maintain 75% of the overstory and 50% of the understory.*
- *Follow-up work on reducing invasive species shall be conducted through handwork.*
- *Following operations, areas will be monitored following the first rain event generating 1.5 inches in a 24-hour period.*

[5] Cal Poly Swanton Pacific Ranch Continuous Forest Inventory. https://spranch.calpoly.edu/forestry-projects-and-research
[6] Forest Vegetation Simulator. https://www.fs.fed.us/fvs/

Biological Resource Avoidance Measures

1. *If any California Endangered Species Act (CESA) or Federally Endangered Species (ESA) listed plant or animal is encountered, operations shall cease in proximity, and the area shall be avoided. San Mateo County Resource Conservation District, or their supervised designee shall be notified immediately.*

2. *Nesting and bat roost surveys are required from February 1st to August 31st and shall be conducted within 7 days of any mechanical mastication operations in treatment areas by San Mateo County Resource Conservation District, or their supervised designee to determine if nesting activity is occurring.*

    a. *Areas where nesting and bat roosts are found to occur shall have a buffer zone flagged in orange glo of 50 – 100 feet depending on the species needs. San Mateo County Resource Conservation District, or their supervised designee reserve the right to increase the buffer size as needed to protect sensitive species.*

    b. *Disturbance of nests/dens/roosts/nest cavities shall be avoided. If the Contractor identifies an active nest/den/roost/nest cavity, a buffer should be established between the construction activities of 100 feet and the active nest/den/roost/nest cavity so that nesting activities are not interrupted. San Mateo County Resource Conservation District, or their supervised designee shall be advised immediately.*

3. *It is likely that contractors will encounter woodrat nests. Woodrat nests should receive a buffer of 5 – 10 feet. Woodrat nests may only be removed if necessary, to access a portion of a treatment area otherwise inaccessible or to reasonably pass from one treatment polygon to another.*

- Vegetation Removal Hierarchy. Except for prescribed fire project components, a vegetation removal hierarchy shall be identified and implemented for each project to obtain the vegetation cover threshold identified by a Registered Professional Forester or qualified professional as necessary while ensuring that unintended habitat conversion does not occur and that vegetation cover is sufficient to support the project's ecological goals. In order of priority and application, the hierarchy shall be as follows: (1) thinning and removal of dead, dying and diseased foliage, shrubs (except that some snags should be retained to provide wildlife shelter, dens, etc.); (2) removal of invasive species; and (3) removal of native species that are not listed as endangered, threatened, rare, or otherwise especially valuable, with the end goal of having appropriate species composition in the plant community with a mix of vegetation age, height and density. In all cases, indicator species and diagnostic species appropriate to the habitat type shall be maintained in accordance with the standards (membership rules) set forth by the second edition of the Manual of California Vegetation (MCV2), with the intention of maintaining cover and composition consistent with meeting project ecological goals. For Fire Prevention projects, additional vegetation removal may be allowed if maintaining such vegetation consistent with project ecological goals would result in an unacceptable fire risk to existing structures and infrastructure, and the removal is the minimum necessary to protect existing structures and infrastructure. Any such additional removal shall be clearly explained and identified in the PSA. Lastly, if vegetation cover threshold goals, as articulated in the MCV2, cannot be met, then removal of endangered, threatened, rare or otherwise especially valuable species and habitats shall be prohibited unless: such removal is critical to reduce the area's fire risk; removal is accompanied by restoration or enhancement such that the overall project provides net benefits to the habitat; and no other alternative exists that meets the project goals.

The Vegetation Removal Hierarchy was designed by multiple resource professionals, including a Registered Professional Forester, to focus on thinning and removal of dead, dying, and diseased foliage, the retention of snags and downed woody debris, and to meet the membership rules of the 2nd edition of the Manual of California Vegetation at the Alliance level for redwood forests. A pre-operational meeting shall be conducted to advise the contractors of all requirements of this project per the CalVTP Project Specific Analysis for Camp Butano Creek. See below for specific details on the Vegetation Removal Hierarchy for Camp Butano Creek:

Tree Treatments

1. *Trees ≤8 inches Diameter at Breast Height (DBH) shall be removed, if under an overstory canopy focusing on the removal of tanoak and overstocked redwood areas. All live larger diameter trees remain.*
    a. *Contractor shall not remove any buckeye, California nutmeg, sycamores, big leaf maple, or red alder.*

2. *Trees ≤8 inches DBH that do not have an overstory canopy shall be spaced leaving approximately 15-20 feet between tree crowns.*
    a. *Consideration shall be given to maintaining a diversity of tree species in these areas where feasible.*

3. *Damage to residual trees shall be minimized to the greatest extent feasible.*

4. *Remove any standing dead trees ≤12 inches DBH.*

5. *All downed dead trees <12 inches in diameter will be delimbed/chipped through mastication or an otherwise agreed upon method with the remaining trunks left in place unless several trees have created a piled concentration. In this case, the remaining tree trunks will be separated by at least 10 feet from any other logs and left on site.*
    a. *Dead Trees >12 inches diameter may be masticated for access around treatment areas but, should remain in place where feasible unless they create a significant fire hazard and shall be separated by at least 10 feet from any other logs and left on site.*

    b. *Contractor shall consider maintaining an appropriate number of snags and downed woody debris within the treatment areas. Target snags should be ~1-2 per acre and similar for downed woody debris >12 inches in diameter.*

6. *A tree of any size considered a hazard and direct threat to personal safety or infrastructure may be removed.*

7. *San Mateo County Resource Conservation District, or their supervised designee, reserve the right to reasonably adjust tree treatments in areas where additional sensitive resources are identified and may adjust the treatment prescription as needed.*

Tree Pruning Treatments

1. *Conifer trees (redwood and Douglas-firs) >8 inches DBH will be pruned (live and dead limbs) up to a minimum height of 8 feet, except next to camp infrastructure and road surfaces, including next to Canyon Road, where the minimum pruning height is 12 feet. No pruning will be done to a height greater than 50% of total tree height. Hardwoods shall not be pruned.*

2. *Conifer (redwood and Douglas-firs) limbs may be pruned with a masticator, but pruned ends shall have a smooth appearance with no frayed material visible especially in areas frequented by the public. Note: This may require follow-up handwork.*

3. *In areas where damage to hardwood limbs (mainly oaks and madrones) are expected due to mechanical mastication, hardwoods shall be pruned by hand to facilitate access and minimize damage to hardwoods species. It is expected that the amount of hardwood limbing will be minimal and focused on a few key areas occupied by larger hardwoods that will need hand pruning treatment to reduce the spread of infection to the remaining hardwood stand. San Mateo County Resource Conservation District, or their supervised designee will provide instruction on hardwood pruning techniques.*

Understory Vegetation, Brush, and Shrub Treatments

1. *Understory vegetation, brush, and shrubs under the drip lines of trees shall be cut and masticated leaving root systems intact for resprouting except:*
    a. *Contractor shall not masticate, or remove through handwork, hydrophytic riparian species such as chain fern (woodwardia), carex sp., rushes, blue elderberry, and red elderberry.*

    b. *Where significant stands of huckleberry, toyon, and hazelnut occur under the drip line of trees, Contractor shall maintain a component of these shrubs at a spacing between 25 – 50 feet for each species occurrence, whose shrub crown is approximately 10-15 feet wide. Spacing may be closer to 25 feet on flatter ground and 50 feet on steeper ground or proximity to infrastructure or homes within treatment areas.*

2. *Outside of the drip line of retained trees, brush and shrubs shall be cut and masticated leaving root systems intact for resprouting to achieve a horizontal crown separation of approximately 25 to 50 feet. Spacing may be closer to 25 feet on flatter ground and 50 feet on steeper ground or proximity to infrastructure or near homes within treatment areas. Remaining clumps of brush and shrubs should not exceed approximately 10-20 feet in diameter and will consist of healthy appearing specimens where feasible. A minimum of 35% relative cover of existing brush, shrubs, and understory vegetation shall be retained in a mosaic pattern across treatment areas.*
    a. *Consideration shall be given to maintaining a diversity of understory vegetation, brush, and shrub species in these areas.*

3. *Damage to residual understory vegetation and brush shall be minimized to the greatest extent feasible.*

4. *San Mateo County Resource Conservation District, or their supervised designee reserve the right to reasonably adjust understory vegetation and brush treatments in areas where additional sensitive resources are identified and may adjust the treatment prescription as needed.*

Treated Vegetation within Treatment Areas

1. *The residual masticated material shall remain uniformly spread to the extent feasible within the project area, shall not exceed a depth of six inches (6") and should average approximately three inches (3"), and individual pieces shall not exceed two feet (2') in length or three inches (3") in diameter at the large end to support regeneration of the understory.*

2. *Excessive residual masticated material shall not obstruct water flow in drainage features such as ditches and culverts. Such material shall be removed by the contractor prior to a forecasted 30% precipitation event or upon completion of operations, whichever occurs first.*

3. *Residual masticated material should be utilized to cover approximately 75% of any areas bared during operations and shall not be piled at the base of remaining trees or sensitive vegetation.*

4. *Upon completion of a treatment area the contractor shall ensure that trails are left open and passable by the public with respect to all possible park users.*
    a. *Scattered debris is acceptable on the trail surface but not to the point that it creates any significant tripping hazards.*

5. *Damage to residual trees and brush shall be minimized to the greatest extent feasible. If there is excessive damage to residual trees or brush, the contractor shall remove those specimens.*

6. *All stump heights will be cut no higher than 6 inches above the ground. All cuts will be a flat or parallel cut to the ground and will have a smooth appearance with no frayed material visible.*

- Limit Equipment Types. All projects shall be carried out using the least invasive type of equipment feasible. Projects shall avoid the use of large masticators, track vehicles, and other heavy equipment, where feasible. When such heavy equipment is used, it shall remain on existing roads to the extent feasible. In riparian habitat, the use of heavy equipment shall be prohibited, except when authorized through a valid Stream and Lakebed Alteration Agreement and/or, if applicable, Clean Water Act 401 Certification, and when reviewed and approved by CCC. Projects shall adhere to CalVTP SPR GEO-2 limiting heavy equipment use and SPR HYD-4 prohibiting heavy equipment use in WLPZ except on existing roads.

Acceptable Heavy Equipment for Camp Butano Creek

1. *Excavator with a boom mounted masticating head capable of reaching a minimum distance of 20 feet.*

2. *Small, tracked tractor such as a skid steer or mini excavator with masticating head capable of working under 8-foot canopies.*

3. *Other heavy equipment may be proposed for use by the Contractor and must be approved by San Mateo County Resource Conservation District. To propose other heavy equipment, the Contractor should be prepared with equipment dimensions, weight, and photos of equipment.*

- Limit Herbicide Use. Herbicides shall be avoided to the maximum extent feasible and may be used only if such treatment activities are the least environmentally damaging feasible alternative and will not result in significant adverse impacts to sensitive ecological resources (e.g., when used to control of invasive species). Projects shall adhere to CalVTP SPRs HAZ-5, 6, 7, 8, and 9.

No herbicide is proposed for use as part of this CalVTP Project Specific Analysis for Camp Butano Creek.

- Prescribed Herbivory Use. Prescribed herbivory may be allowed if it is found to be the least environmentally damaging feasible alternative to achieving project goals. Prescribed herbivory shall be conducted pursuant to an approved plan that ensures protection of habitat and other coastal resources, as documented in the PSA.

No prescribed herbivory is proposed for use as part of this CalVTP Project Specific Analysis for Camp Butano Creek.

- Control Invasive Species. Treatment activities and treatment types shall limit the spread of invasive species and prevent the spread of plant pathogens in all habitats, including those habitats that are not determined to be sensitive natural communities, riparian habitats, or oak woodlands subject to CalVTP SPRs BIO-4 and 9.

  Invasive species controls are hand pulling and mowing for Camp Butano Creek.

- Limit Fencing. The use of wildlife-friendly fencing for prescribed herbivory activities subject to CalVTP SPR BIO-11 shall require adequate ground clearance for smaller species to avoid entrapment and/or entanglement.

  No fencing is proposed for installation as part of this CalVTP Project Specific Analysis for Camp Butano Creek.

- Accelerants. Accelerants shall only be allowed for use in prescribed fire applications. The use of accelerants that could significantly disrupt or degrade ESHA is prohibited.

  No accelerants are proposed for use as part of this CalVTP Project Specific Analysis for Camp Butano Creek.

- Soil Stabilization. The use of riprap and/or chemical soil stabilizers that could significantly disrupt or degrade ESHA is prohibited.

  No use of riprap and/or chemical soil stabilizers are proposed for use as part of this CalVTP Project Specific Analysis for Camp Butano Creek.

- Protect Coastal Public Access and Recreation. Forest Health projects and Fire Prevention projects shall ensure that coastal public access and recreational opportunities are preserved during project operations to the maximum extent feasible, including by, but not limited to, minimizing trail closures, limiting the use of public parking spaces for staging operations, posting accessway signage and using flaggers, and designing construction access corridors in a manner that has the least impact on coastal public access. Following the completion of Forest Health projects and Fire Prevention projects, all impacted coastal public access and recreational amenities shall be restored to existing conditions, in a manner that maximizes coastal public access and recreation.

  The project occurs on private property belonging to the Girl Scouts of Northern California. No portions of the property provide for coastal public access or public recreation. Camp Butano Creek Property has provided a camp for Girl Scout activities since 1948 for thousands of Girl Scouts and their families to access this property.

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