CalVTP Project-Specific Analysis and PWP Coastal Vegetation Treatment Standards

Cambria Reserves Restoration and Vegetation Treatment Project

CalVTP Project ID: 2022-36

Prepared for:

UPPER SALINAS-LAS TABLAS RESOURCE CONSERVATION DISTRICT

CALIFORNIA DEPARTMENT OF FISH & WILDLIFE

April 2023

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LIST OF ABBREVIATIONS

Board	California Board of Forestry and Fire Protection
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council
CalVTP	California Vegetation Treatment Program
CCIC	Central Coast Information Center
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
Coastal Commission	California Coastal Commission
Coastal VTS	Coastal Vegetation Treatment Standards
Commission	California Coastal Commission
CPER	Cambria Pines Ecological Reserve
CRHR	California Register of Historical Resources
CWHR	California Wildlife Habitat Relationships
dbh	diameter at breast height
DPR	California Department of Pesticide Regulation
ELZ	equipment limitation zone
EPA	US Environmental Protection Agency
ESA	federal Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
FRAP	California Department of Forestry and Fire Protection Fire and Resource Assessment Program
GHG	greenhouse gas
HCP	habitat conservation plan

LRA	Local Responsibility Area
MMRP	mitigation monitoring and reporting program
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NO_X	nitrous oxide
NWI	National Wetlands Inventory
PM	particulate matter
Program EIR	Program Environmental Impact Report
project	Cambria Reserves Restoration and Vegetation Treatment Project
proposed project	Cambria Reserves Restoration and Vegetation Treatment Project
PSA	Project-Specific Analysis
PWP	Public Works Plan
RMR	Kenneth S. Norris Rancho Marino Reserve
ROG	reactive organic gas
SENL	single-event noise levels
SLOAPCD	San Luis Obispo County Air Pollution Control District
SRA	State Responsibility Area
SPRs	standard project requirements
TAC	toxic air contaminants
USFWS	US Fish and Wildlife Service
US-LTRCD	Upper Salinas-Las Tablas Resource Conservation District
USGS	US Geological Survey
VMT	vehicle miles traveled
WLPZ	watercourse and lake protection zones

1 INTRODUCTION

1.1 PROJECT OVERVIEW AND DOCUMENT PURPOSE

1.1.1 CEQA and Coastal Act Compliance

The California Board of Forestry and Fire Protection (Board) certified the Program Environmental Impact Report (Program EIR) for the California Vegetation Treatment Program (CalVTP) in December 2019. The Program EIR evaluates the potential environmental effects of implementing vegetation treatments throughout much of the State Responsibility Area (SRA) and selected portions of the Local Responsibility Area (LRA) in California. This document is a Project-Specific Analysis (PSA). The PSA process was designed during Program EIR preparation for use by many state, special district, regional, and local agencies to help increase the pace and scale of vegetation treatment by employing California Environmental Quality Act (CEQA) streamlining tools (i.e., a within-the-scope finding based on the PSA).

The Upper Salinas-Las Tablas Resource Conservation District's (US-LTRCD) certified Public Works Plan (PWP) is a companion to the CalVTP that provides a streamlined mechanism for Coastal Act compliance within the Coastal Zone of a portion of San Luis Obispo County. The PWP requires adherence to the Coastal Vegetation Treatment Standards (Coastal VTS) approved as part of the PWP and additional information about project design within the Coastal Zone (see Attachment A). This PSA addresses the components of the CalVTP as required pursuant to CEQA and includes information that responds to the Coastal VTS as required pursuant to the Coastal Act and PWP. Direct response to the Coastal VTS for the proposed project can be found in Attachment A of this PSA.

To facilitate an increase in the pace and scale of vegetation treatment through CEQA streamlining, the Board is supporting the preparation of PSAs to create a library of example projects that help guide state and local agencies in preparing their own PSAs under the CalVTP Program EIR, as well as to achieve CEQA compliance for the proposed project. The Board selected the vegetation treatment project proposed by US-LTRCD and the California Department of Fish and Wildlife (CDFW) to be one of the PSAs that provides CEQA compliance for project approval and implementation. This PSA serves as an example for other agencies seeking to use the CalVTP Program EIR, as well as a PWP for Coastal Act compliance, to accelerate approval of their own vegetation treatment projects.

1.1.2 Proposed Project

US-LTRCD, in partnership with CDFW, is proposing the Cambria Reserves Restoration and Vegetation Treatment Project (project or proposed project). The project consists of vegetation treatments on up to 291 acres of land, comprising up to 187 acres of land within the University of California Natural Reserve System's Kenneth S. Norris Rancho Marino Reserve (RMR) and 104 acres of land within the Cambria Pines Ecological Reserve (CPER). Both reserves are located in the unincorporated town of Cambria in San Luis Obispo County (Figure 1-1). The proposed project is within the CalVTP treatable landscape.

As discussed further in Section 2, "Treatment Description," the proposed treatment types are fuel break and ecological restoration within RMR and ecological restoration within CPER. At both reserves, the proposed treatment activities would consist of prescribed burning, manual and mechanical treatments, and herbicide application. Ongoing maintenance of initial treatments at both reserves would involve the same vegetation treatment types and activities used in the initial treatment, as funding and other approvals allow. The treatment types and activities included in the proposed project are consistent with those evaluated in the CalVTP.

Source: Data received from CDFW and US-LTRCD in 2022; adapted by Ascent in 2022.

Figure 1-1 Regional Location

1.1.3 Agency Roles

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

As defined by the CalVTP process, both US-LTRCD and CDFW meet the definition of project proponent. However, for clarity, this PSA distinguishes between the two agencies by identifying US-LTRCD as the project proponent, and CDFW as the project partner. For purposes of CEQA compliance, US-LTRCD and CDFW both serve as responsible agencies. US-LTRCD is facilitating the implementation of treatments on RMR. For Coastal Act compliance, US-LTRCD is responsible for partnering with other agencies to implement the procedures in the PWP and is responsible for maintaining oversight to confirm consistency with PWP processes. CDFW owns CPER and will implement the treatments therein, and seeks to use US-LTRCD's PWP for Coastal Act compliance. The California Coastal Commission (Coastal Commission or Commission) is also a responsible agency; in determining whether the proposed project is consistent with the PWP, it will review the PSA and response to the Coastal VTS. Coastal Commission review of a proposed project is deemed complete on the date of a Commission determination that the project is consistent with the PWP, though the Commission retains enforcement authority through its review of monitoring reports.

1.1.4 Purpose of the PSA

This document serves as a PSA to evaluate whether the proposed treatments would be within the scope of the CalVTP Program EIR. Among the criteria for determining whether a treatment project is within the scope of the CalVTP Program EIR is whether it is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the Program EIR). All 104 acres within CPER are classified as treatable landscape. Several small polygons totaling approximately 1 acre of the 187-acre RMR treatment area are outside of, but adjacent to, the treatable landscape. The 1 acre outside of the treatable landscape consists of largely one polygon that overlays a pond (wetland areas were excluded from the CalVTP treatable landscape because they do not contain treatable fuel types) as well as several tiny polygons along the northern edge of the reserve. The CalVTP treatable landscape was digitally developed using desktop applications to apply buffers around geographic features and demarcate jurisdictional boundaries (i.e., SRA and LRA), which resulted in small nontreatable areas that are isolated pixels surrounded by treatable landscape. The areas in RMR that are classified as outside of the treatable landscape would either not be treated (i.e., the pond) or contain the same vegetation types and conditions as the directly adjacent areas and are only shown as outside the treatable landscape due to the mapping resolution used by to develop the CalVTP. Therefore, for the purposes of this PSA, the entirety of the project area where vegetation treatments would be implemented is considered within the geographic scope of the Program EIR.

As stated above and substantiated further in the following sections of this PSA, the proposed project is entirely within the geographic scope of the CalVTP, and, as documented in Section 2, "Treatment Description" of this PSA, the treatment types and treatment activities under the proposed project are consistent with the CalVTP. In addition to these criteria, a proposed vegetation treatment project may be approved using a finding that the project is within the scope of the Program EIR for its CEQA compliance if its environmental effects are covered in the Program EIR, consistent with CEQA Guidelines Section 15168(c)(2). Section 4 presents an evaluation of whether the proposed projects impacts are covered by the Program EIR.

Proposed treatments at RMR and CPER are considered a single project under CEQA and presented together in this PSA to facilitate use of the PWP. The project-specific mitigation monitoring and reporting program (MMRP), which identifies the CalVTP standard project requirements (SPRs) and mitigation measures applicable to the proposed project, is presented in Attachment B. Attachment B comprises two MMRPs, one for each reserve, to assist US-LTRCD and CDFW in implementation of applicable environmental protection features: Attachment B-1 is the MMRP for RMR, and Attachment B-2 is the MMRP for CPER. The SPRs identified in the MMRP have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

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2 TREATMENT DESCRIPTION

The proposed treatments in CPER and RMR are described separately in the following sections.

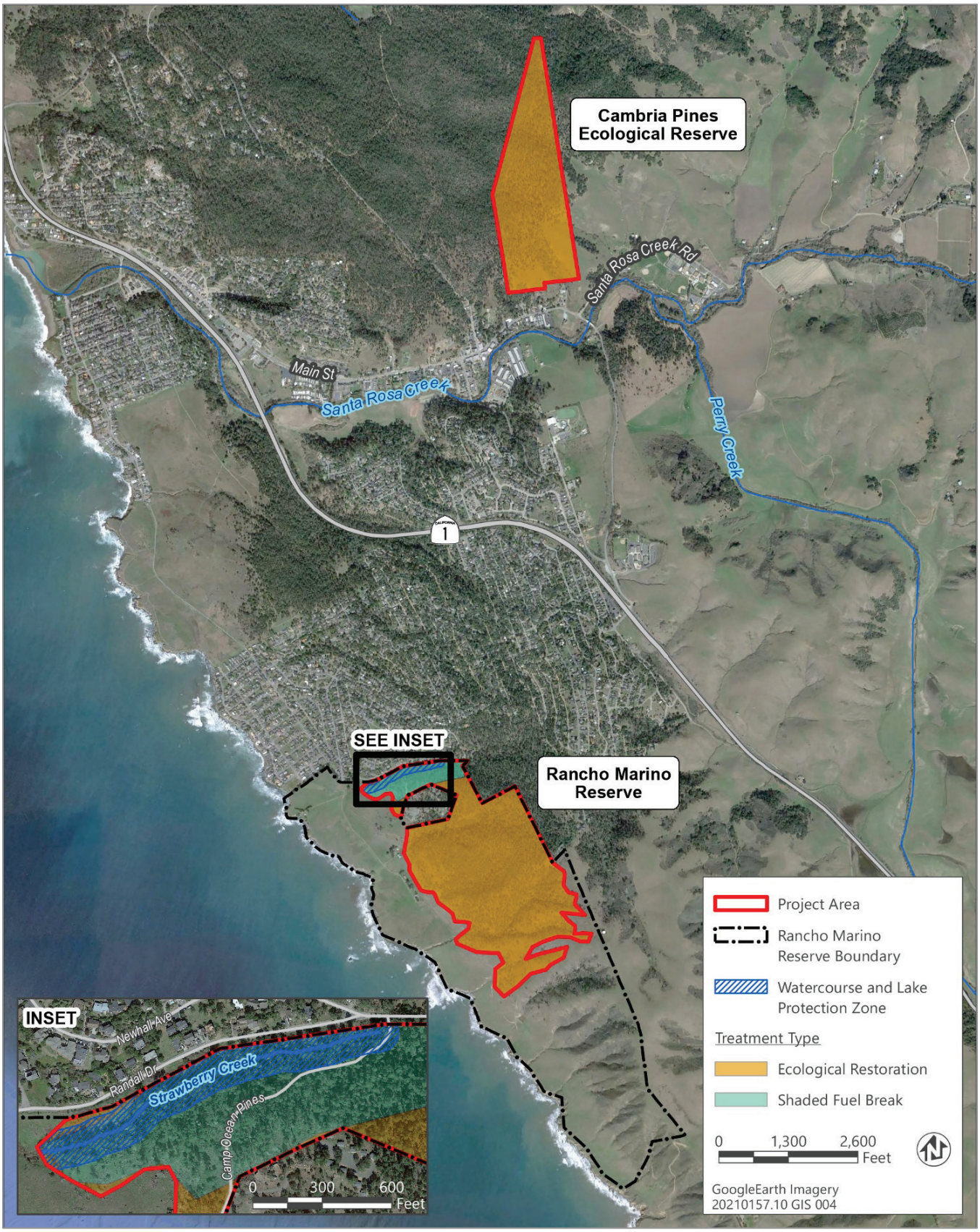
2.1 RESERVE DESCRIPTIONS

2.1.1 Cambria Pines Ecological Reserve

CPER is a 104-acre reserve owned and managed by CDFW (Figure 2-1). The reserve was acquired by CDFW in 2005. Prior to that date, the reserve was private property used for cattle grazing and, in the more distant past, timber harvesting. The vegetation within the majority of the reserve is Monterey pine *(Pinus radiata)* forest, with areas of grassland and shrub communities along south facing slopes. The Monterey pine forest in the reserve is part of the Pico Creek-Cambria stand, one of the three natural stands of the species in mainland California (Burns and Russell 1990) and is designated by CDFW as a sensitive natural community (CDFW 2022). Some drier, more open areas within the Monterey pine forest with shallow soils support fewer trees and are dominated by grasses and forbs, with scattered shrubs, notably the rare La Cruz manzanita (*Arctostaphylos cruzenzis*). The southern portion of the reserve closest to the town of Cambria is a mixture of shrub communities containing coyote brush and poison oak (*Baccharis pilularis-Toxicodendron diversilobum* alliance) and coastal prairie. The reserve is not known to have a history of wildfire over 0.5 acres in size during the 20th or 21st century (CAL FIRE 2022). Greenlee and Langenhem (1990) estimated a pre-European contact fire frequency of 1–15 years in central coast grasslands.

2.1.2 Rancho Marino Reserve

RMR is a 521-acre reserve; however, vegetation treatments are proposed only in 187 acres of Monterey pine forest (Figure 2-1) within the reserve. As discussed for CPER above, the Monterey pine forest on RMR is also part of the Pico Creek-Cambria stand, one of the three natural stands of the species in mainland California (McDonald and Laacke n.d.) and is designated by CDFW as a sensitive natural community (CDFW 2022). The management of RMR by the University of California, Santa Barbara as a research station began in 2001. Historically, the property supported cattle operations beginning in the early 1900s. Currently, cattle graze a small portion of the treatment area along the northern boundary of the reserve. The reserve is not known to have a history of wildfire during the 20th or 21st century (CAL FIRE 2022). The pre-European contact fire frequency for coastal Monterey pine is estimated at approximately 11–20 years (Stephens et al. 2004).



Note: A Watercourse and Lake Protection Zone (WLPZ) is shown within the shaded fuel break treatment type. Additional WLPZs will be identified and applied during project implementation around other drainages, pursuant to SPR HYD-4 when work occurs in those areas.

Figure 2-1 Cambria Pines Ecological Reserve and Rancho Marino Reserve Treatments

2.2 CalVTP TREATMENT TYPES

2.2.1 Cambria Pines Ecological Reserve CalVTP Treatment Types

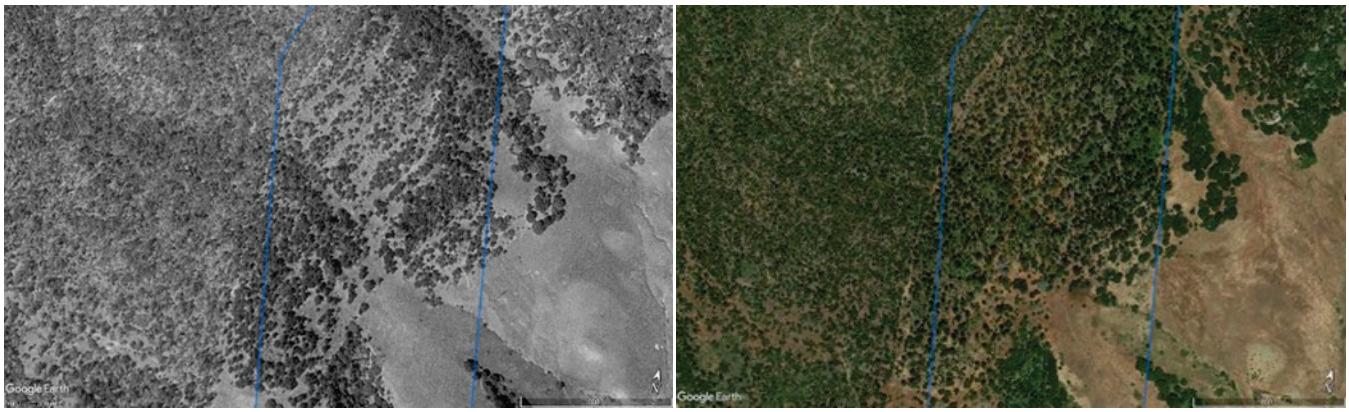
The ecological restoration treatment type would be implemented within CPER. The proposed project area is shown in Figure 2-1, and the CalVTP treatment type and activities that would be used to implement the CPER portion of the project are summarized in Table 2-1. The goals for the proposed vegetation treatments are to control invasive plants, promote germination and recruitment of Monterey pines to maintain a healthy Monterey pine forest, enhance abundance and diversity of native grasses and forbs in grasslands, maintain rare plant populations, and minimize conditions that lead to catastrophic fire and plant community type conversion.

ECOLOGICAL RESTORATION

The ecological restoration treatment type would be implemented within the 104 acres of CPER. Treatment activities would protect and restore ecological function of native Monterey pine forest, shrub communities, and coastal prairie habitat, and promote a natural landscape more resilient to wildfires. Ecological restoration treatment seeks to improve ecological health by mimicking appropriate fire frequencies and providing watershed benefits. For the purposes of the CalVTP and this project, ecological restoration is the process of reestablishing the composition, structure, pattern, integrity, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health currently and in the future.

Monterey Pine Forest

Monterey pine forest has a NatureServe Heritage global and state rarity rank of 3 and is considered a sensitive natural community by CDFW. Monterey pine has a California Rare Plant Rank of 1B.1 The Monterey pine forest in CPER is estimated to have a post-European contact fire return interval of approximately 11–20 years, based on research in a similar native stand (Stephens et al. 2004). There is no record of large fires on the reserve (CAL FIRE 2022). However, there is record of natural ignition and a small fire. A lightning strike started a fire on the reserve on July 24, 2015, which was quickly suppressed and contained to 0.5 acre (the "Bridge Fire"). Another smaller fire in 1994 was started by equipment on-site and contained to 0.1 acre (Potts, pers. comm., 2022). Therefore, the best available information suggests that the natural fire regime no longer exists due to fire suppression and exclusion in this Monterey pine forest. It follows that the understory density is greater than what would have occurred with a natural fire regime. A review of aerial photos (Figure 2-2) shows an increase in tree density and canopy area on CPER since 1994. Areas with dense, relatively young pines, such as the northern half of CPER, exhibit high rates of disease and suppressed growth, which is most likely a result of overstocking. This condition may also be compounded by the current, extended drought. The dense understory, abundance of dead and downed fuels, and increased tree canopy creates a fuel ladder that risks a crown fire during wildfire.



Source: Data received from CDFW in 2022.

Central part of Cambria Pines Ecological Reserve (between the blue property lines). Photo on left is from 1994 and on the right is from 2017, showing increased tree density, particularly in the center, where the south-facing slope supported large patches of grassland between patches of trees. La Cruz manzanita plants are concentrated in those areas where the tree canopy appears to have been relatively sparse in 1994.

Figure 2-2 Photos of the Central Part of Cambria Pines Ecological Reserve

The goals for vegetation treatment within the Monterey pine forest are to improve forest health and maintain Monterey pine dominance in the canopy. The goals would be achieved by reducing dead and down fuels and the height and density of the fuel ladder. This would reduce the risk of a catastrophic crown fire and improve conditions for Monterey pine germination and recruitment. While Monterey pine forest would not likely convert to another type following a catastrophic fire, it would likely lead to a completely even-aged stand of very dense, small poles that would be highly susceptible to disease and reburns. Following a catastrophic wildfire in a Monterey pine stand north of Cambria, a large number of Monterey pine seedlings grew where the CZU Lightning Complex Fire burned south of Año Nuevo. That condition would require much more thinning and fuels reduction to achieve the same kind of structural and age class diversity that occurs on CPER today.

Natural and unnatural fire has been suppressed at this location. Additionally, Dr. Sarah Bisbing, a forest ecologist from Cal Poly San Luis Obispo and now University of Nevada, Reno, concluded that the climate in Cambria is becoming generally less conducive to Monterey pine dominance (Hacker pers. comm., 2023a). These circumstances appear to be facilitating a trend toward greater coast live oak cover, which has been observed elsewhere in the Cambria stand. Therefore, since the primary purpose of establishing the CPER is to conserve Monterey pine forest, it is appropriate to manage the forest composition directly to introduce and/or mimic fire to promote vigor and climate resiliency in the existing Monterey pine forest and reduce the chances of catastrophic fire. CDFW would reduce oak tree cover manually to initiate disturbance effects similar to those produced by natural fire and promote Monterey pine vigor and recruitment. Not all oak trees would be removed, however—oaks of all age classes would remain, and natural oak recruitment would be expected to continue. CDFW would reduce the density of understory oaks, large shrubs, and pines manually, mechanically, and with prescribed burning.

Following recommendations from Piirto and Valkonen (2005), CDFW may also selectively remove individual mature, irreversibly diseased or dying pines to create canopy openings in mature, even-aged stands where pine recruitment is low. This disturbance and selective canopy reduction would in turn increase plant vigor and promote recruitment of new plants, particularly Monterey pines, which regenerate well after fire and other disturbances by increasing sun exposure and preparing a seedbed with reduced competition.

Monterey pines have serotinous cones, which open and drop their seeds in response to fire. Thinning and prescribed fire would promote new age classes of Monterey pines and release pine saplings and poles from competition with large woody shrubs (e.g., toyon [*Heteromeles arbutifolia*]) and coast live oak, to maximize the potential for an uneven-aged forest dominated by Monterey pines. Target stand density would be achieved by retaining the healthiest trees at a 10-20-foot spacing. Most larger, mature coast live oaks greater than 8 inches diameter at breast height (dbh) would be left in place; some irreversibly diseased oaks larger than 8 inches dbh may be removed. The target Monterey pine density

within Monterey pine forest would be between 150 and 250 trees per acre. Live pines up to 8 inches dbh would be removed; additionally, as described above, larger pines may be removed to create canopy openings to increase recruitment. Pines and oaks greater than 8 inches may be selectively removed, if they are a safety hazard, dead or dying, or in irreversibly poor condition. Monterey pine removal would preferentially target diseased (e.g., pitch canker, western gall rust, heavy mistletoe infestation) trees to reduce stand density and increase sunlight penetration. Understory reduction would be accomplished by cutting vegetation using manual treatment activities (e.g., chainsaws).

La Cruz Manzanita

Another goal of the ecological restoration treatment type is to maintain the assemblage of manzanita species that are on CPER, some of which are at risk due to competition from pines and oaks. La Cruz manzanita (*Arctostaphylos cruzensis*) is a very rare special-status plant with a NatureServe G1G2/S1S2 rank and California Rare Plant Rank of 1B.2, and possible variants of this species occur in the north half of CPER. The species is concentrated on the south-facing slopes and ridgetops on sandy soils. La Cruz manzanita reportedly does not resprout from burls or root crowns after fire (Hatch et al. 1999), but its germination response to fire is unknown; therefore, CDFW would take measures to reduce the chance of fire around these plants and would not apply prescribed fire where they occur. This is a prostrate plant, described as a maritime chaparral and coastal prairie species. It typically occurs in the absence of light competition from trees and tall shrubs. Nearly all recorded observations in CalFlora and iNaturalist are in treeless plant communities. The occurrences on CPER are within Monterey pine forest but concentrated within the relatively open portions of the forest. Review of 1994 aerial photos shows these areas with significantly less tree cover than current photos (see Figure 2-2 above). The historic photos, the species' distribution in the remainder of its range, its described ecology, and the current distribution on-site suggest that the plants established when tree cover was less than it is now.

The area containing high concentration of La Cruz manzanita in the northwest part of the property is being invaded by Monterey pine saplings and poles. The concentration in the central part of the reserve appears to be in a more established Monterey pine stand, but the aerial photos show it as being more open in recent history. A natural fire regime and then cattle grazing may have kept these areas more open before CDFW obtained the property. Tree thinning and limbing around manzanitas would occur to reduce competition and catastrophic fire risk. Saplings and poles growing up through La Cruz manzanita would be removed using manual treatment activities to avoid direct impacts to the manzanitas. Tree canopy would be thinned where manzanitas occur to maintain a more open woodland character.

Other Rare Plants

Two other rare plant species have been documented on CPER: harlequin lotus (*Hosackia gracilis*) and California Gairdner's yampah *(Perideridia gairdneri* ssp. *Gairdneri).* Both species are categorized as California Rare Plant Rank 4.2 (plants of limited distribution; fairly threatened in California). Generally, these plants are known from coastal prairies, northern coastal scrub, coniferous forest, and wetland habitats. In accordance with CEQA Guidelines Section 15380, the CalVTP Program EIR defines special-status plants as those with a California Rare Plant Rank 1 or 2 or those defined as locally rare with a lower rank; because these species are locally abundant in the project vicinity and are categorized as California Rare Plant Rank 4.2, they are not defined as special-status plants in this PSA. On CPER, these species are found in the more mesic areas with low grasses, sedges, and other herbaceous plants. They are concentrated along the edges and adjoining lower slopes along the two swales that cross the property in the Monterey pine forest. Perennial shrub and vine cover, and dead and down woody vegetation, would be thinned where these plants occur to reduce light competition.

Shrub Communities

Shrub-dominated plant communities containing coyote brush and poison oak (*Baccharis pilularis-Toxicodendron diversilobum* alliance) occur at the south end of CPER. Other common coastal scrub species such as California sage *(Artemisia californica),* lizard tail (*Eriophyllum staechadifolium*), and sticky monkey flower (*Diplacus aurantiacus*) are present but are not dominant. Scattered coast live oaks and Monterey pines occur within these communities. This area was historically heavily grazed, which facilitated an invasion of French broom.

This patch of shrubs would be broadcast burned once if practicable to further treat weed infestations and to promote a vigorous regrowth of the native shrubs and forbs. Manual treatment activities to reduce fuel ladder height under

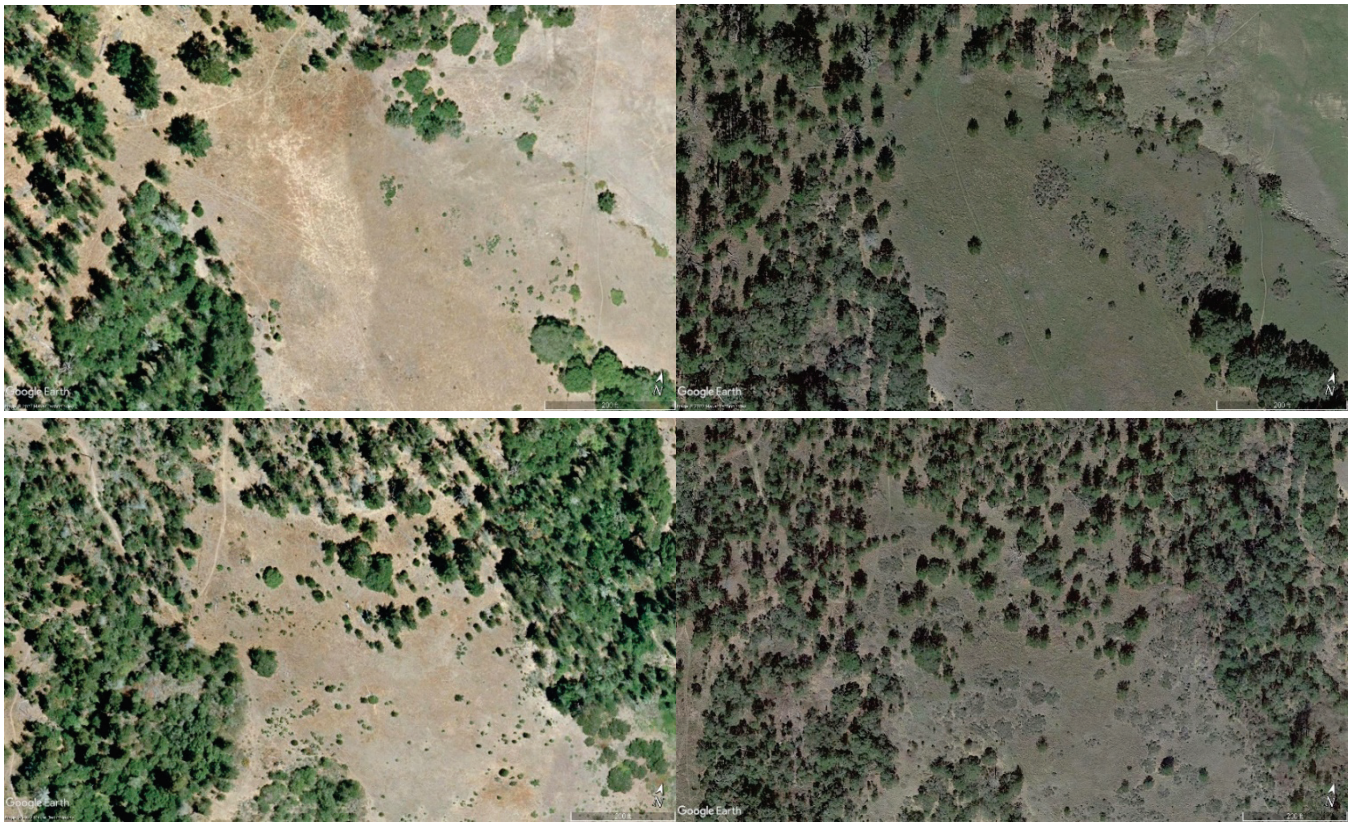
the large coast live oaks lining the upper boundary of this area would precede any burning to reduce the chance of a crown fire (although coast live oaks typically survive quick crown fires). Individual pines that are irrecoverably diseased or damaged would be removed and piled for burning.

Coastal Prairie

Central California's coastal prairies are rare and contain much higher plant species diversity than serpentine grasslands, Monterey pine forest, the interior grasslands, and coastal scrub (Stromberg et al. 2001). The lack of fire and grazing in the coastal prairie grasslands on CPER is allowing Monterey pines and pioneering shrubs (mostly coyote brush) to begin to establish in coastal prairie habitat. Succession toward shrub and tree cover after removing livestock is a known threat to coastal prairie in California. Early stages of that succession are directly observable in the young Monterey pines scattered in grasslands next to the mature forest and in patches of coyote brush expanding into the grasslands and not associated with other coastal scrub species. A review of aerial photos of the site, beginning in 1994, shows open grasslands being invaded by shrubs and pines after CDFW obtained the property and excluded livestock grazing (Figure 2-3 below).

The lack of fire and grazing is also allowing the introduced grasses to create a dense thatch, which is suppressing native, prostrate forbs such as Cambria morning glory (*Calystegia subacaulis* ssp. *episcopalis*, California Rare Plant Rank 4.2) that occurs here, and favoring the nonnative annual grasses. Thatch buildup increases the risk of more intense fire that can kill mature native bunchgrasses. On California's central coast, releasing coastal prairies from grazing has been shown to reduce cover of native annual forbs (Hayes and Holl 2003) and *Danthonia californica* (Hatch et al. 1999; Hayes and Holl 2003), one of the two primary native perennial grasses on-site. Also in coastal prairie, on the central coast, low-intensity, spring burning has been shown to reduce introduced annual species seed production and thatch, and to increase native perennial grass seedling establishment. Summer burns have been shown to increase the number and vigor of *Stipa pulchra* plants (Menke 1992). Similarly, fall burns have been shown to increase *Stipa pulchra* cover in California coastal grasslands (Hatch et al. 1999).

Treatments would be aimed at reducing thatch, reducing tree and shrub encroachment in some areas, and favoring cover of the native perennial grasses (e.g., *Danthonia californica* and *Stipa pulchra*) and forbs. Areas that were grassland in recent history but now appear to be trending toward Monterey pine forest will be allowed to continue trending toward Monterey pine forest. A low-intensity broadcast burn would be the preferred method in coastal prairie, following manual and mechanical removal of some pioneering trees and shrubs.



Source: Data received from CDFW in 2022.

Coastal prairie on east (top) and west (bottom) sides of Cambria Pines Ecological Reserve. Left photos are from June 30, 2007. Right photos are from February 26, 2021. Note expanded shrub cover and pioneering trees in coastal prairie grasslands in 2021.

Figure 2-3 Coastal Prairie on East and West Sides of Cambria Pines Ecological Reserve

Invasive Plant Species

French broom (*Genista monspessulana*) is naturalized at CPER and in the region. This invasive shrub continues to increase in extent and density. Its dense stands outcompete native plants and increase the fuel load and height on CPER. French broom treatment would aim to favor native plant competition, reduce the fuel load, and reduce the fuel ladder. The invasive perennials purple pampas grass (*Cortaderia jubata*) and bulbous canarygrass (*Phalaris aquatica*) would also be targeted for removal.

2.2.2 Rancho Marino Reserve Treatment Types

Monterey pine forests on RMR have been identified as rare, important forestland in need of restorative management focused on forest health and wildfire prevention. The project proposes ecological restoration and shaded fuel break treatment types to increase the health and vigor of the Monterey pine forest, increase biological diversity, and reduce the severity of wildfire. The RMR treatment area is shown in Figure 2-1 and the CalVTP treatment types and activities that would be implemented on RMR are summarized in Table 2-1.

ECOLOGICAL RESTORATION

The ecological restoration treatment type would be implemented within a maximum of 170 acres at RMR to protect and restore ecological function of native Monterey pine forest. The best available information suggests that this Monterey pine forest is outside the natural fire regime (CAL FIRE 2022). Therefore, it is assumed that the understory density is greater than what would have occurred with a natural fire regime. In addition, prolonged drought conditions and

climate- and disease-induced demographic shifts have led to widespread mortality and stressed forest conditions for the Monterey pines in the Cambria area where RMR is located (Bisbing 2018). Furthermore, excessive buildup of understory shrub composition could serve as available ladder fuels resulting in increased severity of fire behavior. The resulting and continued accumulation of dry, dead vegetation poses a significant risk of a catastrophic, stand-replacing wildfire. Initial treatment activities would aim to return the landscape closer to conditions that mimic the coastal Monterey pine natural fire regime of approximately 11–20 years (Stephens et al. 2004) by reducing excess buildup of fire fuels in conjunction with controlling nonnative, invasive plants. Reducing fuels to a level that enables prescribed broadcast burning is a long-term goal. Reduction of existing fuels coupled with invasive species management would ultimately support habitat conditions, including habitat quality and natural fire processes.

The ecological restoration treatment type would be used to restore ecosystem processes, native stand conditions, and forestland resiliency by reducing dead, dying, and irreversibly diseased trees as well as thinning live/healthy trees up to 8 inches dbh. Monterey pine removal would preferentially target diseased (e.g., pitch canker, heavy mistletoe infestation) trees to reduce stand density and increase sunlight penetration. Ladder fuels would be thinned to reduce the vertical arrangement of hazardous fuels leading to forest canopy. Downed, woody surface fuels and leafy material would be piled for later burning to reduce understory fuel loads with the exception of retaining woodrat middens as well as a mosaic of woody debris and herbaceous vegetation for wildlife habitat. See Section 2.3.2 for detailed descriptions of treatment activities.

Treatments would largely consist of a mixture of manual and mechanical treatment activities (Table 2-1). The primary treatment activity would be manual treatment. Mechanical treatment would be a secondary option that is used sparingly because it can create ground disturbance and may result in a landscape that is not consistent with UC reserve aesthetic standards.

The objective of this work is to selectively thin dense/overstocked tree stands, diseased tree populations, and underlying brush to improve forest health, increase climate resiliency, and lessen the risk of wildfire through these restoration activities. Implementation of the ecological restoration treatment type would result in a modification of the existing fuels, which would reduce the risk of stand-replacing fire events and support the restoration of native vegetation and habitat conditions. This would result in an increase in habitat quality and allow for natural low-intensity fire events. The removal of understory vegetation would mimic a natural disturbance that encourages forest succession to occur, influencing the amount of carbon stored in the forest (Dale et al. 2000). Thinning of the stand from below through the removal of small diameter live trees and understory vegetation would result in an increased carrying capacity of the site, which would stimulate growth of the residual dominant and codominant trees (Skovsgaard and Vanclay 2008). The accumulation 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.

SHADED FUEL BREAK

This project proposes to install a 17-acre shaded fuel break with the primary objective of protecting the campers at Camp Ocean Pines. The proposed shaded fuel break would be implemented in forested habitats that occur between the neighborhood adjacent to the north boundary of RMR and Camp Ocean Pines, a privately owned children's camp inholding adjacent to but outside the treatment area. The proposed shaded fuel break treatment type would occur adjacent to Randall Road and extend south for 400–500 feet to the bordering property of Camp Ocean Pines (Figure 2-1). As described in the Program EIR (Section 2.5.1, "Description of Treatment Types," in Volume II of the Final Program EIR), fuel break designs are variable, and the width of each fuel break varies and depends on location, vegetation, topography, fire regime, and property.

Various factors contribute to the proposed design of this shaded fuel break. The access road is the only access to Camp Ocean Pines, which receives 5,000 visitors annually and visitors usually spend four nights resulting in 20,000 person nights. The treatment area vegetation type from Randall Road to Camp Ocean Pines is primarily forest (e.g., Monterey pine forest and approximately 5.5 acres of riparian woodland) and contains slopes up to 50 percent. Surface and ladder fuels within the treatment area range from fine to large and woody. Concentrations of downed woody fuel (jackpots) occur sporadically along Randall Road. Vertical and horizontal arrangement of both live and dead fuels within the treatment area

could lead to increased rate of spread or an independent crown fire. In conjunction with native plants, a suite of nonnative invasive weeds exists in the fuel break treatment area. Steep topography and dense vegetation could result in extreme fire behavior in the event of a wildfire. Prolonged exposure of children housed at Camp Ocean Pines to hazardous existing fire conditions presents high fire risk to a vulnerable population in the community. Therefore, adequate protection is paramount to ensure safety and is necessary in the case of mandatory evacuation or shelter in place protocols.

The approximate distance from Randall Road to the access road is 150 feet and from the access road to the camp is 250 feet. Measurements made via aerial imagery indicate that distances from Randall Road to the camp vary between 400 and 500 feet. The resulting 400- to 500-foot shaded fuel break width is the approximate sum of the treatment area from Randall Road to the camp, incorporating both sides of the access road and extending to the camp structures (see inset of Figure 2-1). The justification for the width of the fuel break is supported by local California Department of Forestry and Fire Protection (CAL FIRE) representatives (Gee, pers. comm., 2022).

Similar to the ecological restoration treatment type, the shaded fuel break treatment type would be used to restore ecosystem processes, native stand conditions, and forestland resiliency by reducing dead, dying, and irreversibly diseased trees, and thinning live/healthy trees up to 8 inches dbh. Generally, minimum treatment activity specifications would be achieved in the shaded fuel break treatment plot outside of the WLPZ. Therefore, the results of the shaded fuel break will contrast the surrounding forested area. Ladder fuels would be thinned to reduce the vertical arrangement of hazardous fuels leading to forest canopy. Selective thinning of shrubs would occur to reduce horizontal continuity while retaining a mosaic of native shrubs at a spacing of 75–100 feet between crowns, where the combined crown for each clump is approximately 15–25 feet wide. Downed, woody surface fuels and leafy material would be piled for later burning to reduce understory fuel loads, while retaining some understory vegetation and downed wood for wildlife habitat (see Section 2.3.2, "Rancho Marino Reserve Treatment Activities," for retention standards).

The shaded fuel break treatment area would encompass Strawberry Creek, a Class II seasonal creek, and associated riparian habitat. SPRs from the CalVTP Program EIR would be required to maintain water quality and maintain habitat function of the riparian habitat (see Section 4.5, "Biological Resources" and Section 4.10, "Hydrology and Water Quality"). Pursuant to SPR BIO-3, at least 75 percent of the overstory and 50 percent of the understory would be retained within the limits of riparian habitat, and equipment limitations, restrictions on pile burning, and additional surface vegetation retention requirements would be implemented in designated watercourse and lake protection zones (WLPZ) pursuant to SPR HYD-4. WLPZ width is based on water class and slope. For Strawberry Creek, a Class II stream with an approximately 30 to 50 percent slope on either side, a 75-foot WLPZ would be implemented on each side of the creek in compliance with SPR HYD-4 (see Figure 2-1 for approximate WLPZ location). Removal of riparian hardwood trees would be minimized to the extent feasible, and 75 percent of the native riparian tree canopy would be retained, as described previously (SPR BIO-3). Removed trees would be felled away from the adjacent stream and piled outside of the WLPZ. Manual treatment would be utilized in the WLPZ to reduce ground disturbance and potential erosion into waterway.

The objectives and goals of the proposed shaded fuel break are multi-faceted. Treatment types within the shaded fuel break would help to restore ecosystem processes, native stand conditions, and forestland resiliency. Moreover, implementing a shaded fuel break along Randall Road would reduce the threat of catastrophic wildfire to the camp and its campers as well as protect the surrounding residents that live in the neighboring community. The goals tailored to this project location include creating control points to allow firefighters to actively fight wildfire and improve the safety of the singular ingress and egress roadway that serves as an escape route for Camp Ocean Pines. The proposed shaded fuel break would not halt extreme wind driven wildfires, but would reduce potential fire spread, flame lengths, and probability of torching/independent crown fires. Furthermore, in combination with Randall Road, the shaded fuel break would result in a reduction of flammable vegetation along the access road. The combination of Randall Road and gaps in vegetation in the shaded fuel break could provide value for staging equipment and personnel at Camp Ocean Pines for fire suppression efforts.

Table 2-1 Proposed Treatments by Reserve

Reserve	CalVTP Treatment Type	Treatment Description	CalVTP Treatment Activity	Treatment Size (acres)	Equipment Used for Treatments
Cambria Pines Ecological Reserve	Ecological Restoration	Control invasive plants, promote recruitment of Monterey pines, maintain rare plant populations, enhance abundance and diversity of native grass and forbs in grasslands, and minimize conditions that lead to catastrophic fire and plant community type conversion	Mechanical and manual vegetation treatment, herbicide application on invasive perennials, prescribed burning	Up to 104 acres	Mowers, track chippers, chainsaws and other hand tools, backpack or hand sprayers (for herbicide), wildland engines (water during burning), air curtain burner and/or carbonator
Rancho Marino Reserve	Ecological Restoration	Reduce vertical and horizontal fuel continuity in Monterey pine stands, promote recruitment of Monterey pines, maintain rare plant populations, and minimize conditions that lead to catastrophic fire and plant community type conversion	Mechanical and manual vegetation treatment, limited herbicide application on invasive perennials, prescribed burning	Up to 170 acres	Masticators, trailered and track chippers, chainsaws and other hand tools, backpack or hand sprayers (for herbicide), wildland engines (water during burning), air curtain burner and/or carbonator
	Shaded Fuel Break	Reduce vertical and horizontal fuel continuity in Monterey pine stands adjacent to roads and a children's camp to provide ingress/egress and staging for firefighting, and promote life safety; also, promote recruitment of Monterey pines, maintain any rare plant populations and sensitive habitats, and minimize conditions that lead to catastrophic fire and plant community type conversion	Mechanical (trailered chippers) and manual vegetation treatment, limited herbicide application on invasive perennials, prescribed burning	Up to 17 acres	Chainsaws and other hand tools, trailered chippers, backpack or hand sprayers (for herbicide), wildland engines (water during burning), air curtain burner and/or carbonator
	Total Acres			**291 acres**	

Source: provided by CDFW staff and US-LTRCD in 2022.

2.3 TREATMENT ACTIVITIES

2.3.1 Cambria Pines Ecological Reserve Treatment Activities

The proposed vegetation treatment activities are manual treatment, mechanical treatment, prescribed burning, and targeted ground application of herbicides. Treatments would occur in Monterey pine forest, shrub communities, and coastal prairie. Manual and mechanical treatment and prescribed burning would be followed by spot application of herbicide on invasive plants in year one and in successive years to treat regrowth as needed. In addition to French broom, a few patches of the invasive, nonnative plant species purple pampas grass also occur on-site and would be treated with herbicide application, mechanically, and/or by prescribed burning. Bulbous canarygrass is invading some areas of coastal prairie and would be treated with herbicide, mechanical treatment, and/or prescribed burning. Each of these treatment activities is described in more detail below and consistent with the treatment activities described in the CalVTP. Table 2-1 provides the maximum acres of treatment activities.

Treatment activities could occur during any time of year, although vegetation removal during the nesting bird season would be avoided when feasible (see Section 4.5, "Biological Resources," for nesting bird protections if seasonal avoidance is not feasible). Although there is the potential for prescribed burning to occur during nighttime and weekend hours, all manual, mechanical, and herbicide treatment activities and associated equipment use would be limited to daytime hours. Treatments would begin in 2023 or as soon as possible thereafter, as resources are available to implement the initial treatment and ongoing maintenance.

Vegetation removal during treatment activities other than prescribed burning would follow the hierarchy described in the Coastal Vegetation Treatment Standards and the order of priority for removal to meet project goals will be as follows: first thinning and removal of dead, dying, and diseased vegetation; then removal of nonnative, invasive plant species; and lastly removal of healthy native species.

Small-diameter trees, downed woody debris, and woody shrubs would be thinned to increase tree spacing and reduce fire fuel loads in targeted areas. Root systems of all cut native vegetation would remain in place. Generally, treatment activities would:

- retain 150–250 trees per acre in pine forest;
- cut and pile live woody shrubs and trees up to 8 inches dbh for burning or chipping;
- cut and pile trees greater than 8 inches dbh only when they are hazards or severely diseased;
- remove limbs of large trees up to 15 feet high;
- cut and pile standing dead trees/shrubs and downed woody debris up to 24 inches in diameter, while retaining at least three to five snags per acre with a preference for the largest snags and logs that exhibit the form and decay characteristics favored by wildlife);
- protect rare plants including La Cruz manzanita (see Impact BIO-1 and Mitigation Measure BIO-1b for measures to protect this species);
- retain mature oaks unless irreversibly diseased, dying, or if they pose a hazard;
- retain native shrubs (e.g., toyon, gooseberry, and snowberry), and other desirable species in a mosaic to best mimic a natural fire regime at an approximate spacing of 75–100 feet between crowns, where the combined crown for each clump is approximately 15–25 feet wide; however, distances between crowns may be greater if needed to mimic the natural fire regime as determined by a qualified biologist or RPF; and
- retain coastal prairie dominated by native species by removing encroaching pines and coyote brush.

PRESCRIBED BURNING

Prescribed burning consists of two general types, pile burning and broadcast burning.

- **Pile burning**[1]: Biomass from manual and mechanical treatment would be piled by hand and burned appropriately. Pile burning would occur in understory or in areas with little to no live overstory, including areas that have experienced previous wildfire. Pile burning would not occur in grasslands or in areas that support rare plants. Pursuant to SPR GEO-6, burn piles would not occupy more than 15 percent of the total treatment area. Trained fire crews would be conducting and monitoring the implementation of pile burning throughout initial and maintenance treatments.
- **Broadcast burning**: Broadcast burning would be used to promote forest health and replicate a more natural fire return interval. Pretreatment of vegetation using manual and mechanical activities or herbicide application would occur in areas proposed for prescribed burning. These treatments would also promote a more natural, sustainable, and wildfire-resilient native landscape.

[1] Pile burning is a mechanism to consume biomass; however, the impact analysis in the CalVTP Program EIR considers pile burning under prescribed burning to account for similar impacts as broadcast burning, which is also considered under prescribed burning. Similarly, chipping is a biomass processing method that has similar impacts to and is considered under mechanical treatments in the Program EIR.

Specialized biomass processing technologies[2], such as air curtain burning and carbonization, may be used for biomass disposal as an alternative to pile burning in some areas. The intent of using these technologies is to sequester carbon for soil amendments, reduce the production of smoke particles, and reduce greenhouse gas (GHG) emissions released into the atmosphere to the extent feasible. Refer to Section 2.4.2, "Specialized Biomass Processing Technologies," for additional information related to these technologies.

The goal of the prescribed burning is to return the ecological benefits of fire to the reserve, by replicating fire characteristics that would occur under a more frequent fire return interval than the fire return interval that has occurred since fire suppression began. Pile burning and broadcast burning may be used on the entire site (104 acres). Prescribed burning would occur only after mechanical and manual treatments reduce understory height and density and then pile dead, down, and cut fuels. Prescribed burning would be designed to burn only piles and/or create a low-intensity ground fire. Existing trails would be used for control lines when available; however, there are few informal singletrack trails that do not create a polygon in which burns could be contained. Control lines would be constructed using manual treatment activities to retain root structures and minimize erosion. Control lines would be sited to avoid wetlands and riparian areas and to minimize impacts to rare plants.

Prescribed burns typically last 1 day and may occur for up to 1 week. The average number of workers on-site for a prescribed burn is 45. Equipment used for a prescribed burn includes two to 10 fire engines, two to four crews, and on-site water trucks for fire suppression. A burn permit would be obtained from CAL FIRE if required and per SPR AQ-2 and AQ-3, smoke management plans and burn plans would be required.

MECHANICAL VEGETATION TREATMENT

Mowers may be used in grasslands and shrub communities prior to burning to treat herbaceous vegetation (e.g., grasses and forbs) and reduce flame heights. Tracked chippers may be used to chip dead or cut vegetation. Mastication is not proposed. Typically, crews of up to 20 crewmembers would implement treatments, and treatments would require several days up to several months to complete.

MANUAL VEGETATION TREATMENT

Hand tools such as chainsaws would be used to thin the density of trees and shrubs, and to buck up logs and other fuels to place in burn piles. Multiple hand crews of up to 20 crewmembers each may be on-site at the same time during manual treatments. The duration of this work would be several weeks to months long for the initial treatment and would continue as needed during the maintenance period. Initial treatment may also occur on portions of the reserve, spread across multiple years, as opposed to treating all treatment areas in one year. The use of manual treatment with hand crews results in a longer duration per acre of initial treatment than similar projects using other treatment activities (e.g., mechanical).

HERBICIDE APPLICATION

Consistent with the definitions applied in the CalVTP, invasive species are those plant species identified as invasive by the California Invasive Plant Council (Cal-IPC) or defined as noxious weeds under California law by the California Department of Food and Agriculture. The occasional use of herbicides to treat invasive plant species would be implemented to promote native biodiversity. Manual and mechanical removal and prescribed burning would be followed by spot application (e.g., backpack sprayer, paintbrushes) of herbicide to invasive plants in year one and in successive years to treat regrowth. Treatments would occur in Monterey pine forest, shrub communities, and coastal prairie. Herbicide treatments would typically use a one- to five-person crew.

[2] Biomass processing technologies have been designed to consume biomass quickly and efficiently with a substantial reduction in smoke compared to pile burning (refer to additional information in Section 4.3, "Air Quality" and Section 4.7, "Greenhouse Gas Emissions"). Mitigation Measure GHG-2 in the CalVTP Program EIR requires project proponents to implement feasible methods, including the use of air curtain burners and carbonators, to reduce the greenhouse gas (GHG) emissions from pile burning.

Spot application of herbicides is a targeted use as opposed to broadcast spraying, which would not be used. Herbicides would be used in the limited circumstances and small areas where manual, mechanical, and prescribed fire treatments are not effective at eradicating the targeted invasive species. The primary target is French broom, which has largely been removed in the last two years. However, a French broom seed bank lasts at least 5–7 years, so targeted application on seedlings would continue after initial treatment. The other known targets at this time are bulbous canarygrass and pampas grass, which have a very limited extent on the reserve.

Glyphosate or other herbicides approved for wildland application in San Luis Obispo County and disclosed in the CalVTP Program EIR may be used. Herbicide application would comply with the US Environmental Protection Agency (EPA) label directions, as well as California Environmental Protection Agency and Department of Pesticide Regulation (DPR) label standards. In addition, several herbicides proposed for use (e.g., glyphosate, hexazinone, imazapyr, and triclopyr) are subject to the California Red-Legged Frog Injunction (Center for Biological Diversity v. US EPA [2006] Case No. 02-1580-JSW), and therefore, specific application requirements apply (EPA n.d.). CDFW would comply with all laws and regulations governing the use of herbicides.

Herbicides that may be applied under the CalVTP are:

- Borax (tetraborate decahydrate);
- Clopyralid (monoethanolamine salt);
- Glyphosate (isopropylamine salt, potassium salt, dimethylamine salt & diammonium salt);
- Hexazinone;
- Imazapyr (isopropylamine salt);
- Sulfometuron Methyl;
- Triclopyr (butoxyethyl ester & triethylamine salt);
- Nonylphenol 9 Ethoxylates (NP9E);
- Cleantraxx (penoxsulam & oxyfluorfen);
- Velpar (hexazinone); and
- Indaziflam.

2.3.2 Rancho Marino Reserve Treatment Activities

The proposed vegetation treatment activities include manual treatment, mechanical treatment, prescribed burning, and targeted ground application of herbicides. Treatment activities would consist primarily of manual and mechanical treatment. Pile burning would be used for biomass disposal of slash and debris piles, and occasional use of herbicide treatments may be employed in areas of French broom. Treatments would occur in Monterey pine forests. Each of these treatment activities is described in more detail below and consistent with the treatment activities described in the CalVTP. Table 2-1 provides the maximum acres of treatment activities. Treatment activities could occur during any time of year, although implementation of treatment activities during the nesting bird season would be avoided when feasible (see Section 4.5, "Biological Resources," for nesting bird protections if seasonal avoidance is not feasible). Although there is the potential for prescribed burning to occur during nighttime and weekend hours, all mechanical, manual, and herbicide treatment activities would be limited to daytime hours on Monday through Friday. Treatments would likely begin in fall of 2023 or 2024, or as soon as possible thereafter.

Vegetation removal during treatment activities other than prescribed burning would follow the hierarchy described in the Coastal Vegetation Treatment Standards and the order of priority for removal to meet project goals will be as follows: first thinning and removal of dead, dying, and diseased vegetation; then removal of nonnative, invasive plant species; and lastly removal of healthy native species.

Generally, treatment activities would:

- remove live trees up to 8 inches dbh and live woody shrubs, while maintaining retention standards listed below;
- retain 150–250 trees per acre and three to five snags per acre with a preference for the largest snags that exhibit the form and decay characteristics favored by wildlife;
- retain a 15–20 foot spacing between retained trees under 8 inches dbh;
- retain woodrat middens for wildlife habitat;
- retain woody debris in strategic locations to maintain forest floor complexity while reducing fuel connectivity. While masticating, operators would minimize disturbance to down wood greater than 12 inches in diameter where feasible, only moving large pieces of woody debris when necessary to reduce fire behavior or gain access to larger portions of treatment areas, with a per acre retention target of 1–4 downed logs 15 feet in length and greater than or equal to 12 inches in diameter (Strong et al. 2016) per acre with a preference for the largest logs that exhibit the form and decay characteristics favored by wildlife;
- retain a mosaic of native shrubs at a spacing of 75–100 feet between crowns, where the combined crown for each clump is approximately 15–25 feet wide. Retention of less common native shrubs (i.e., coffeeberry and toyon) would be prioritized over common shrubs (e.g., poison oak);
- retain existing native herbaceous species to the extent practicable in ecological restoration treatments;
- outside of riparian areas, generally retain a minimum of 5–10 percent herbaceous understory vegetation per acre in a mosaic pattern;
- selectively thin dead and dying, irreversibly diseased, and hazard trees of any size;
- remove dead and dying ladder fuels including shrubs, subshrubs, and tree limbs;
- although chips would not remain on-site in most areas, where retained on-site, chip depth would average 3 inches in depth (maximum of 4 inches) and spread in a mosaic pattern such that herbaceous vegetation growth would not be suppressed;
- biomass remaining after mastication would be no more than 6 inches deep;
- reduce nonnative, invasive plant species; and
- pile material for future pile burning during appropriate time of year.

Vegetation treatment activities would be implemented by cutting vegetation with manual hand tools (e.g., chainsaws) or mechanical mastication, followed by pile or broadcast burning (or through use of specialized biomass processing technologies). Trees greater than 8 inches dbh may be removed if they are a public safety hazard, dead or dying, irreversibly diseased, substantially damaged, or an invasive nonnative plant species.

PRESCRIBED BURNING

Prescribed burning consists of two general types, pile burning and broadcast burning (under burning). Pile burning and broadcast burning may be used throughout the entire site (187 acres); however, pursuant to SPR GEO-6, burn piles would not occupy more than 15 percent of the total treatment area.

- **Pile burning**[3]: Biomass generated by treatment activities would be piled and left to cure to burn later. Pile burning is proposed within the 187-acre treatment area to reduce excess residual fuels following understory treatments. Trained fire crews would be conducting and monitoring the implementation of pile burning throughout initial and maintenance treatments. Trained fire crews would implement pile burning operations

[3] Pile burning is a mechanism to consume biomass; however, the impact analysis in the CalVTP Program EIR considers pile burning under prescribed burning to account for similar impacts as broadcast burning, which is also considered under prescribed burning. Similarly, mastication and chipping are biomass processing methods that have similar impacts to and are considered under mechanical treatments in the Program EIR.

during designated burn days. A Burn Permit would be obtained from CAL FIRE if open burn season is closed. Pile burning would be implemented in densely vegetated areas prior to broadcast burning.

- Broadcast burning: Broadcast burning would be used to promote forest health and replicate a more natural fire return interval. Manual, mechanical, or herbicide activities, alone or in combination, would be implemented on vegetation prior to broadcast burning. US-LT RCD, as well as the RMR manager and CAL FIRE representatives would assess the possibility of implementing a prescribed broadcast burn operation after adequate fuel reduction. In particularly densely vegetated areas, vegetation would be piled and burned prior to broadcast burning. Implementing other treatment activities to reduce fire fuel before broadcast burning would reduce severe fire behavior and clear space necessary for fire personnel to actively manage and implement prescribed burn operations. These treatments would also promote a more natural, sustainable, and wildfire resilient native landscape. The goal of the prescribed burning is to return the ecological benefits of fire to the reserve by replicating fire characteristics that would occur under a more frequent fire return interval than the fire return interval that has occurred since fire suppression began. Prescribed burning would be designed to create a low-intensity ground fire. Control lines would be constructed using hand tools to retain root structures and minimize erosion.

Specialized biomass processing technologies[4], such as air curtain burning and carbonization, may be used for biomass disposal as an alternative to pile burning in some areas. The intent of using these technologies is to sequester carbon for soil amendments, reduce the production of smoke particles, and reduce GHG emissions released into the atmosphere to the extent feasible. Refer to Section 2.4.2, "Specialized Biomass Processing Technologies," for additional information related to these technologies.

Prescribed burns typically last 1 day and may occur for up to 1 week. The average number of workers on-site for a prescribed burn is 45, depending on acreage and complexity. The size of a prescribed burn plot for Monterey Pines varies depending on topography, fuel loads, and natural fuel breaks such as roads and or trails. Typically burn plots in Monterey Pine stands would not exceed more than five acres and would be pieced into approximately one-tenth-of-an-acre parcels to ensure quick suppression. Often prescribed fires are suppressed abruptly due to low air quality from inadequate smoke dispersal. Seldomly, prescribed burns need to be suppressed in the event of unforeseen weather changes that increase the rate of fire spread. Equipment used for a prescribed burn include two to 10 engines, two to four crews, up to two bulldozers and bulldozer transports, masticators, or track chippers (to create control lines), and on-site water truck for fire suppression. Although limited, there is a network of roads and trails at RMR that would be used as control lines when available. A burn permit would be obtained from CAL FIRE if required and per SPR AQ-2 and AQ-3, smoke management plans and burn plans would be required.

MANUAL VEGETATION TREATMENT

Manual treatment activities would be the primary activities implemented within the 187-acre treatment area. Manual treatment would be implemented in areas surrounding wetlands and other waters (e.g., Class II and Class III watercourses) following requirements of SPR HYD-4, and in areas where slopes are greater than 40 percent. Manual treatments consist of the use of hand-operated tools (both power and nonpower tools) to cut, clear, or prune herbaceous or woody species. Ground disturbance during manual treatments is typically less than that of mechanical treatments, allowing for treatments to be carried out in sensitive habitats where mechanical, herbicide, or prescribed burning treatments are not feasible or appropriate. Vegetation debris accumulated after manual treatments would be lopped and scattered on-site within the treated areas or piled and subsequently burned during wet periods of the year to dispose of accumulated biomass.

Manual treatment would consist of crew members using chainsaws and hand tools to reduce fuel loads to thin the density of trees and shrubs, prune ladder fuels and vegetation, and buck up logs and other fuels to place in burn

[4] Biomass processing technologies have been designed to consume biomass quickly and efficiently with a substantial reduction in smoke compared to pile burning (refer to additional information in Section 4.3, "Air Quality" and Section 4.7, "Greenhouse Gas Emissions"). Mitigation Measure GHG-2 in the CalVTP Program EIR requires project proponents to implement feasible methods, including the use of air curtain burners and carbonators, to reduce the greenhouse gas (GHG) emissions from pile burning.

piles. Typically, one or two hand crews (i.e., 20–40 crew members) and four to eight chainsaws are used for manual treatments. Manual treatments can take 6 months or longer depending on the treatment size and type of vegetation.

MECHANICAL VEGETATION TREATMENT

Proposed activities consist of mechanical treatments as a secondary option including maintenance treatments, within the 187-acre property. Masticators would be used to treat dense stands of understory vegetation and ladder fuels and maintain a healthy overstory. As described in the CalVTP Final Program EIR Volume II page 2-22, mechanical treatments may cut, uproot, crush/compact, or chop existing vegetation using masticators and other methods of application.

This project proposes to limit mastication to the cutting or chopping of above-ground vegetation with the intent of keeping masticating heads approximately 6 inches above ground when treating live understory vegetation, out of duff layers, minimizing direct disturbance to subsurface soil layers, and leaving root systems intact for resprouting. Understory debris would be masticated or chipped on-site within the treated areas or piled and subsequently burned during wet periods of the year to dispose of accumulated biomass. Mechanical treatments are efficient in removing dead, dying, and diseased trees and understory fuels over large areas of land to help mimic disturbance necessary for natural regeneration.

Mechanical treatments would use a vehicle mounted masticator to cut and chip understory ladder fuels. Mechanical treatments would remove live trees up to 8 inches dbh and maintain a mosaic of established native shrubs by spacing shrubs 75–100 feet between shrub clumps. Less common native shrubs would be prioritized for retention and to the extent possible. Native grasses and forbs would be retained.

Chippers may be used on-site to break down woody debris after manual felling. Tow-behind (i.e., trailered) chipper access is limited by terrain but would be an available option in some locations as terrain allows. Tracked chippers may be used to follow the manual treatment crew for breakdown and dispersal of woody debris. Tracked or wheeled vehicles may be used to assist with the piling of materials in preparation for pile burning. Mechanical treatment would be carried out by a crew of approximately 20 workers and would require several days to months to complete. Mastication activity would be closely monitored, and a water source would be identified in the event of the machine serving as an ignition source. Mastication would be prioritized to occur outside of nesting bird season, if feasible (see Section 4.5, "Biological Resources," for nesting bird surveys and protections if seasonal avoidance is not feasible).

HERBICIDE APPLICATION

Limited herbicide application may be considered where invasive species are present or expected to occur within the 187-acre treatment area to promote regeneration of native species and reduce the spread of invasive vegetation. Herbicide treatment is predominantly expected to occur near roads and trails where increased sunlight is present, which would significantly limit the actual acreage to which herbicide is applied. Herbicides, aquatic and terrestrial, would not be utilized within WLPZs or equipment limitation zones (ELZ) and would be predominantly focused where invasive weeds are expected to occur (e.g., sunlight openings). Consistent with the CalVTP Final Program EIR Volume II pp. 2-27 through 2-28, herbicide application may only be implemented at ground-level from equipment on vehicles or by manual application devices and must comply with the EPA directions, as well as California Environmental Protection Agency and DPR label standards. In addition, several herbicides proposed for use (e.g., glyphosate, hexazinone, imazapyr, and triclopyr), are subject to the California Red-Legged Frog Injunction (Center for Biological Diversity v. US EPA [2006] Case No. 02-1580-JSW), and therefore, specific application requirements apply (EPA n.d.). While herbicide application is not anticipated to be a primary treatment activity for this project, it may be used in conjunction with other treatment activities to control the colonization and spread of invasive plants following initial treatments. Herbicide treatments would typically use a one- to five-person crew.

Herbicides that may be applied under the CalVTP are:

- Borax (tetraborate decahydrate);
- Clopyralid (monoethanolamine salt);
- Glyphosate (isopropylamine salt, potassium salt, dimethylamine salt & diammonium salt);

- Hexazinone;
- Imazapyr (isopropylamine salt);
- Sulfometuron Methyl;
- Triclopyr (butoxyethyl ester & triethylamine salt);
- Nonylphenol 9 Ethoxylates (NP9E);
- Cleantraxx (penoxsulam & oxyfluorfen);
- Velpar (hexazinone); and
- Indaziflam.

2.4 BIOMASS PROCESSING

2.4.1 Biomass Processing Methods

CAMBRIA PINES ECOLOGICAL RESERVE

Vegetation may be cut and piled, chipped, or lopped and scattered. Cut and chipped vegetation may be left on-site or burned on-site in the form of broadcast burning, pile burning, or use of specialized biomass processing technologies (e.g., air curtain burner, carbonator). Use of biomass processing technologies may result in biochar or ash, which would be scattered on-site as a soil amendment. Biochar and ash depth would average 3 inches in depth (maximum of 4 inches) and spread in a mosaic pattern such that herbaceous vegetation growth would not be suppressed. Refer to Section 2.4.2, "Specialized Biomass Processing Technologies," for additional information related to these technologies. Invasive plant and noxious weed biomass may be treated on-site to eliminate seeds and propagules or off-site at an appropriate waste collection facility. Other biomass (e.g., chips) may be disposed of off-site at an appropriate waste collection facility.

RANCHO MARINO RESERVE

Biomass disposal would occur through lop and scatter and pile burning or by using specialized biomass processing technologies (e.g., air curtain burner, carbonator) where appropriate. Chipping or mastication would be a secondary option for biomass processing.

The proposed vegetation treatments described above primarily would be disposed of on-site by the following means:

- pile burning or specialized biomass processing technologies (approximately 90 percent), which may be used to dispose of slash, chipped, and masticated materials. Use of biomass processing technologies (e.g., air curtain burner, carbonator) may result in biochar or ash, which would be scattered on-site as a soil amendment. Biochar and ash depth would average 3 inches in depth (maximum of 4 inches) and spread in a mosaic pattern such that herbaceous vegetation growth would not be suppressed. Refer to Section 2.4.2, "Specialized Biomass Processing Technologies," for additional information related to these technologies.
- lopping and scattering within the treatment boundaries (approximately 10 percent) and would be left within 2 inches of the ground to promote decomposition.

If necessary, masticated (mulched) vegetative debris would be placed on the ground concurrently with vegetation removal, or vegetation would be chipped and spread within the treatment areas. The biomass remaining after mastication would be no more than 6 inches deep. Although chips would not remain on-site in most areas, where retained on-site, chip depth would average 3 inches in depth (maximum of 4 inches depth) and spread in a mosaic pattern such that herbaceous vegetation growth would not be suppressed. Invasive plant and noxious weed biomass

would be treated on-site to eliminate seeds and propagules or off-site at an appropriate waste collection facility. Other biomass (e.g., chips) may be disposed of off-site at an appropriate waste collection facility.

2.4.2 Specialized Biomass Processing Technologies

Specialized biomass processing technologies, such as air curtain burning and carbonization, may be used as an alternative to pile burning in some areas. The intent of using these technologies is to sequester carbon for soil amendments, reduce the production of smoke particles, and reduce GHG emissions released into the atmosphere to the extent feasible. Biomass processing technologies have been designed to consume biomass quickly and efficiently with a substantial reduction in smoke compared to pile burning (refer to additional information in Section 4.3, "Air Quality" and Section 4.7, "Greenhouse Gas Emissions"). Mitigation Measure GHG-2 in the CalVTP Program EIR requires project proponents to implement feasible methods, including the use of air curtain burners and carbonators, to reduce GHG emissions from pile burning. The use of these technologies is proposed in compliance with Mitigation Measure GHG-2.

- Air curtain burning: Biomass may be burned inside an aboveground air curtain burner (e.g., BurnBoss T24), if deemed useful and a suitable location for safely deploying the unit is found (i.e., a flat area with sufficient space from vegetation to avoid accidental ignition). This unit is self-contained and can be towed with a standard heavy-duty pickup truck. During treatments, it would be stationed on level areas previously disturbed or previously burned by prescribed burning that are devoid of vegetation. Once the burning is complete, wood ash and biochar are left behind and may be turned back into the soil. A small US EPA Tier 4 diesel engine powers this system. At full power, it consumes one-third of a gallon of diesel fuel per hour.
- Carbonization: Biomass may be burned using a carbonator (i.e., biochar kiln) to reduce smoke and gas production and yield stable carbon in the form of biochar. A biochar kiln is an above-ground chamber that releases nearly no net gas. These units can be either self-contained or open and can be moved around to meet the needs of the operators. Designs vary depending on the feedstock (i.e., biomass source), mobility of the unit, and volumes a biochar kiln can process. Biochar kilns can use feedstock as the source of ignition or rely on small propane burners to initiate the fire to produce biochar.

The resulting biochar or ash from use of these biomass processing technologies may be scattered on-site as a soil amendment. Biochar is a black carbon produced from these processes for the purpose of transforming the biomass carbon into a more stable form, thereby facilitating its sequestration.

2.5 TREATMENT MAINTENANCE

Retreatment for maintenance of desired vegetation conditions (referred to as "treatment maintenance" in the CalVTP Program EIR) in the areas initially treated for the proposed project could be ongoing and continuous in both CPER and RMR, as funding and land management authorizations allow. Treatment maintenance would manage the reserves to achieve the same goals outlined for the initial treatment, including controlling nonnative invasive plants, germination and recruitment of vigorous Monterey pines, promoting native grass and forbs in grasslands, and minimizing conditions that lead to catastrophic fire and plant community type conversion. Prescribed burning may result in very dense stands of Monterey pine saplings and poles, which is a natural response and hence a natural stage of Monterey pine forest succession. This may necessitate future thinning of young Monterey pines to prevent growth of hazardous fuels. Retreatment activities, such as selective manual or hand-thinning, hazardous tree removal, and invasive species removal may occur more frequently than the natural fire return interval. However, retreatment at the magnitude and intensity of initial treatment, such as mechanical or broadcast burning, would not be implemented outside of the fire return interval for the vegetation type being treated.

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 project 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. If environmental conditions evolve or project approaches change to the degree that the project proponent finds that new or substantially more severe impacts may occur, the project proponent would determine whether a new PSA or other environmental

analysis is warranted. The monitoring reports required by the Coastal Commission pursuant to the PWP also provide opportunity to consider the need for adaptive management and an assessment of any changes in conditions that may affect project consistency with the PWP (see Attachment B for additional reporting requirements).

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 conditions are substantially similar to those anticipated in the PSA. Updated information should be documented.

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3 ENVIRONMENTAL CHECKLIST

VEGETATION TREATMENT PROJECT INFORMATION

1.	**Project Title:**	Cambria Reserves Restoration and Vegetation Treatment Project
2.	**CalVTP I.D. Number:**	2022-36
3.	**Project Proponent's Name and Address:**	Upper Salinas-Las Tablas Resource Conservation District 9481 El Camino Real Atascadero, CA 93422
4.	**Project Proponent's Contact Information:**	Spencer Gordon, Project Manager 805.460.7272 ext. 2 spencer@us-ltrcd.org
5.	**Project Partner's Name and Address:**	California Department of Fish and Wildlife Lands and Wildlife Management, R4 Coastal 3196 South Higuera St., Suite A San Luis Obispo, CA 93401
6.	**Project Partner's Contact Information**	David Hacker, Senior Environmental Scientist 805.594.6152 David.Hacker@wildlife.ca.gov
7.	**Project Location:**	Rancho Marino Reserve, Cambria, San Luis Obispo County, CA. Approximately 0.7 mile west of State Route (SR) 1, accessible from SR 1 via Ardath Drive and Randall Drive. Latitude (Y): 35.54167, Longitude (X): -121.07953. Cambria Pines Ecological Reserve, Cambria, San Luis Obispo County, CA. Approximately 1 mile east of SR 1, accessible from SR 1 via Main Street. Latitude (Y): 35.57147, Longitude (X): -121.08059. USGS Cambria Quadrangle, California, T27S, R8E, S23. See Figure 1-1 and Figure 2-1
8.	**Total Area to Be Treated (acres)**	Up to 291 acres

9. **Description of Project**:

The following discussion includes a summary of the proposed project. See Chapter 2, "Project Description," above for a detailed description of the proposed project.

The Cambria Reserves Restoration and Vegetation Treatment Project (project or proposed project) consists of proposed vegetation treatments within the Cambria Pines Ecological Reserve (CPER), which is owned and managed by CDFW, and the University of California Natural Reserve System's Kenneth S. Norris Rancho Marino Reserve (RMR). RMR is privately owned but managed by the University of California, Santa Barbara.

CPER is a 104-acre reserve. The vegetation within the majority of the reserve is Monterey pine forest, with areas of grassland and shrub communities along south facing slopes. The ecological restoration treatment type would be implemented within the 104 acres of CPER. Treatments would protect and restore ecological function of native Monterey pine forest, shrub communities, and coastal prairie habitat, and promote a natural landscape more resilient to wildfires. The proposed vegetation treatment activities in CPER are manual treatment, mechanical treatment, prescribed burning, and targeted ground application of herbicides. Biomass processing would occur on-site in the form of broadcast burning, pile burning, or specialized biomass processing technologies (i.e., air curtain burner, carbonator). Vegetation may be cut and piled, chipped, or lopped and scattered. Equipment used for ecological restoration treatments within CPER would consist of

mowers, tracked chippers, chainsaws and other hand tools, backpack or hand sprayers (for herbicide application), and wildland fire engines (to provide water during burning). Treatment activities would range from 1 day and for up to 1 week for prescribed burns and from several days up to several months for mechanical and manual treatments.

RMR is a 521-acre reserve; however, vegetation treatments are proposed only in 187 acres of Monterey pine forest within the reserve. The project proposes ecological restoration and shaded fuel break treatment types to increase the health and vigor of the Monterey pine forest, increase biological diversity, reduce the threat of catastrophic wildfire, create a staging area for fire suppression efforts, and improve the safety of the singular ingress and egress roadway that serves as an escape route for Camp Ocean Pines. The ecological restoration treatment type would be implemented within a maximum of 170 acres at RMR to protect and restore ecological function of native Monterey pine forest. Equipment used for ecological restoration treatments within RMR would consist of chippers, masticators, chainsaws and other hand tools, backpack or hand sprayers (for herbicide), and wildland fire engines (for water during burning). This project also proposes to install and maintain a 17-acre shaded fuel break in forested habitats within the RMR treatment area. Equipment used for the shaded fuel break treatment type within RMR would consist of chainsaws and other hand tools, backpack or hand sprayers (for herbicide), trailered chippers, and wildland fire engines. The proposed vegetation treatment activities in RMR are manual treatment, mechanical treatment (chippers), prescribed burning, and targeted ground application of herbicides. Biomass disposal would occur through lop and scatter and pile burning or by air curtain burning or carbonization where appropriate. Chipping or mastication would be a secondary option for biomass processing. Treatment activities would range from 1 day and for up to 1 week for prescribed burns and from several days up to several months for mechanical and manual treatments.

Retreatment for maintenance of desired vegetation conditions in the areas initially treated for the proposed project would be ongoing and continuous in both CPER and RMR, as funding and land management authorizations allow.

a. Initial Treatment

Initial treatments would include ecological restoration treatments by manual and mechanical treatment methods. See Chapter 2, "Project Description," for additional details.

Treatment Types *[See description in CalVTP Program EIR Section 2.5.1, check every applicable category, and provide detail in description of initial treatment.]*

☐ Wildland-Urban Interface Fuel Reduction

☒ Fuel Break (Shaded Fuel Break on RMR)

☒ Ecological Restoration (CPER and RMR)

Treatment Activities *[see description in CalVTP Program EIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in description of Initial Treatment]*

Maximum Treatment Area			
Treatment Activity	Cambria Pines Ecological Reserve	Rancho Marino Reserve	Total (Both Reserves)
Prescribed Burning (Broadcast)	Up to 104 acres	Up to 187 acres	Up to 291 acres
Prescribed Burning (Pile Burning)	Up to 104 acres	Up to 187 acres	Up to 291 acres
Mechanical Treatment	Up to 104 acres[1]	Up to 187 acres	Up to 291 acres
Manual Treatment	Up to 104 acres	Up to 187 acres	Up to 291 acres
Prescribed Herbivory	Not applicable	Not applicable	Not applicable
Herbicide Application[2]	Up to 104 acres	Up to 187 acres	Up to 291 acres

Notes:

1. Mechanical treatments at Cambria Pines Ecological Reserve would be limited to mowing around burn piles and chipping.
2. Herbicide application would be limited to spot application. Herbicides would be used in the limited circumstances and small areas where manual, mechanical, and prescribed fire treatments are not effective at eradicating the targeted invasive species.

Fuel Type *[See description in CalVTP Program EIR Section 2.5.2, check every applicable category, include number of acres subject to each treatment activity, and provide detail in description of initial treatment.]*

☒ Grass Fuel Type (CPER and RMR)

☒ Shrub Fuel Type (CPER)

☒ Tree Fuel Type (CPER and RMR)

b. Treatment Maintenance

[Insert description here; identify planned maintenance intervals, including the site conditions that are reasonably expected to be present in the future in response to the initial treatment, as well as the vegetation conditions that would trigger the need for maintenance.]

Treatment Types *[See description in CalVTP Program EIR Section 2.5.1, check every applicable category, and provide detail in description of initial treatment.]*

☐ Wildland-Urban Interface Fuel Reduction

☒ Fuel Break (Shaded Fuel Break on RMR)

☒ Ecological Restoration (CPER and RMR)

Treatment Activities *[See description in CalVTP Program EIR Section 2.5.2, check every applicable category, include number of acres subject to each treatment activity, and provide detail in description of initial treatment.]*

Maximum Treatment Area			
Treatment Activity	Cambria Pines Ecological Reserve	Rancho Marino Reserve	Total (Both Reserves)
Prescribed Burning (Broadcast)	Up to 104 acres	Up to 187 acres	Up to 291 acres
Prescribed Burning (Pile Burning)	Up to 104 acres	Up to 187 acres	Up to 291 acres
Mechanical Treatment	Up to 104 acres[1]	Up to 187 acres	Up to 291 acres
Manual Treatment	Up to 104 acres	Up to 187 acres	Up to 291 acres
Prescribed Herbivory	Not applicable	Not applicable	Not applicable
Herbicide Application[2]	Up to 104 acres	Up to 187 acres	Up to 291 acres

Notes:
1. Mechanical treatments at Cambria Pines Ecological Reserve would be limited to mowing around burn piles and chipping.
2. Herbicide application would be limited to spot application. Herbicides would be used in the limited circumstances and small areas where manual, mechanical, and prescribed fire treatments are not effective at eradicating the targeted invasive species.

Fuel Type *[See description in CalVTP Program EIR Section 2.5.2, check every applicable category, include number of acres subject to each treatment activity, and provide detail in description of initial treatment.]*

☒ Grass Fuel Type (CPER and RMR)

☒ Shrub Fuel Type (CPER)

☒ Tree Fuel Type (CPER and RMR)

Use of the PSA for Treatment Maintenance

See Section 2.5, "Treatment Maintenance," above.

10. Regional Setting and Surrounding Land Uses:

CPER and RMR are both within the unincorporated community of Cambria, located in San Luis Obispo County. CPER is accessible from SR 1 via Main Street. The CPER treatment area is surrounded by commercial and residential land uses to the south and Monterey pine forest to the west, north, and east. The coastline is approximately 1.7 miles to the west of the CPER treatment area. RMR is accessible from SR 1 via Ardath Drive and Randall Drive. The RMR treatment area is bordered by a residential neighborhood and Monterey pine forest to the north and undeveloped

open space to the west, south, and east. The northwestern portion of the RMR treatment area also borders the property line of Camp Ocean Pines, a privately owned children's camp and conference center. The coastline is approximately 0.1 mile to the west of the RMR treatment area.

The elevation of the treatment area ranges from approximately 108 feet to 462 feet above sea level in CPER and 69 feet to 590 feet above sea level in RMR. The vegetation within the majority of CPER is Monterey pine *(Pinus radiata)* forest, with areas of grassland and shrub communities. The southern portion of CPER closest to the town of Cambria is a mixture of shrub communities containing coyote brush and poison oak and coastal prairie. The vegetation within the RMR treatment area consists of Monterey pine forest. The RMR treatment area contains a stream with associated riparian habitat (i.e., Strawberry Creek) and a pond.

11. Other Public Agencies Whose Approval Is Required: (e.g., permits)

Coastal Act Compliance

☐ The proposed project is NOT within the Coastal Zone.

☒ The proposed project is within the Coastal Zone.

The proposed project is within the Coastal Zone, as defined by the California Coastal Act, and described in SPR AD-9 in the CalVTP Program EIR (CalVTP Final Program EIR Volume II page 2-34), and therefore requires approval by the Coastal Commission. Collaboration with staff from the Coastal Commission, US-LTRCD, the San Luis Obispo County Planning and Building Department, CAL FIRE, and the San Luis Obispo County Fire Safe Council resulted in the development and certification of a Public Works Plan (PWP) in lieu of a coastal development permit through the creation of the Coastal Vegetation Treatment Standards (Coastal VTS) (see Attachment A for the Coastal VTS and Coastal VTS consistency documentation for the proposed project). Project approval is subject to the review and issuance of a Notice of Impending Development.

US-LTRCD and CDFW staff conducted a site visit to the RMR and CPER treatment areas with Coastal Commission staff on November 3, 2022. On November 10, 2022, US-LTRCD provided a draft treatment description to Coastal Commission staff for early review; feedback was provided by Coastal Commission staff on November 22, 2022, and was incorporated into the draft PSA. The Coastal Commission staff received a draft Cambria Reserves Restoration and Vegetation Treatment Project PSA for their review on March 3, 2023, and provided comments to the US-LTRCD and CDFW on March 30, 2023. The US-LTRCD and CDFW met on April 10, 2023, with Coastal Commission staff to discuss their comments.

CAL FIRE received the draft Cambria Reserves Restoration and Vegetation Treatment Project PSA for review on March 3, 2022, and provided comments to the US-LTRCD and CDFW on March 27, 2023.

CDFW Central Region regulatory staff and US Fish and Wildlife Service (USFWS) Ventura Field Office were consulted during the preparation of the PSA for this project, as required by Mitigation Measure BIO-2a. Documentation describing the project and measures that are included to avoid and minimize impacts to special-status species and habitat were provided to CDFW on March 10, 2023, and USFWS on March 3, 2023, and a conference call with CDFW took place on April 5, 2023, and with USFWS took place on March 27, 2023. Refer to Section 4.5, "Biological Resources," for additional information.

12. Native American Consultation. *The Board of Forestry and Fire Protection completed consultation pursuant to Public Resources Code Section 21080.3.1 during preparation of the Program EIR; however, CalVTP SPR CUL-2 requires further tribal coordination during PSA preparation.*

Consistent with CalVTP SPR CUL-2, a list of geographically affiliated Native American representatives was obtained from the Native American Heritage Commission on June 30, 2022. US-LTRCD contacted the 14 Native American representatives by mail and/or email on December 19, 2022, or February 1-2, 2023, inviting each Native American representative to consult on the proposed project. A response from a representative of the yak tityu tityu yak tiłhini Northern Chumash Tribe was received on January 19, 2023, and two responses were received from representatives of the Barbereno/Ventureno Band of Mission Indians on February 1, 2023. US-LTRCD responded to both tribes on January 19, 2023, and February 1, 2023, respectively. No further responses from the two tribes were received as of

March 3, 2023, and no other tribes responded. Based on the outcome of the tribal outreach, no project changes were proposed. Refer to Section 4.4, "Archaeological, Historical, and Tribal Cultural Resources," for more information.

DETERMINATION

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

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

☐ I find that the proposed project revisions will not result in substantial changes in the project, no substantial changes in circumstances have occurred, and no new information of substantial importance has been identified. The proposed project revisions will not result in any new or substantially more severe significant impacts. None of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred; therefore, an **ADDENDUM** is adopted to address the proposed project revisions presented in the Program EIR.

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

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

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

Signature — Date: 5/1/23

Printed Name: Devin Best — Title: Executive Director

Agency: VSLTRCD

DocuSigned by: Julie Vance FA83F09FE08945A...

Signature — Date: 5/12/2023

Julie A. Vance — Regional Manager, Central Region

Printed Name — Title

California Department of Fish and Wildlife

Agency

4 PROJECT-SPECIFIC ANALYSIS FOR CAMBRIA PINES ECOLOGICAL RESERVE AND RANCHO MARINO RESERVE

4.1 AESTHETICS AND VISUAL RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	LTS	Impact AES-1, pp. 3.2-16 – 3.2-19	Yes	AD-4 AES-2 AQ-2 AQ-3	NA	LTS	No	Yes
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Wildland-Urban Interface Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	Yes	AD-4 AES-1 AES-3	NA	LTS	No	Yes
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Nonshaded Fuel Break Treatment Type	SU	Impact AES-3, pp. 3.2-25 – 3.2-27	No	—	—	—	—	—

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Aesthetic and Visual Resource Impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

IMPACT AES-1

Initial and maintenance treatments would be implemented using prescribed burning, mechanical treatment, manual treatment, and targeted application of herbicides. The potential for these treatment activities to result in short-term degradation of the visual character of the project area was examined in the Program EIR. The eligible state scenic highway nearest to the reserves is SR 1 (California Department of Transportation 2023), approximately 1 mile from both reserves. The proposed treatments would occur within CPER, which is owned by CDFW, and within RMR, which is privately owned but managed by the University of California, Santa Barbara. Neither reserve is accessible to the public, with the exception of student researchers hosted at RMR. However, public viewpoints of the reserves are available from adjacent residences. Viewpoints of CPER are available from Main Street, Santa Rosa Creek Road, and Covell Ranch, adjacent to CPER property. Viewpoints of RMR are available from SR1, a private children's camp, Camp Ocean Pines, as well as by student researchers when permitted on RMR. Although a portion of RMR is adjacent to SR 1, visibility of treatment areas would be limited from the highway and no vegetation would be removed immediately adjacent to the highway. However, smoke from prescribed burning could be temporarily visible from public viewpoints and eligible state scenic highways for a short period of time. Additionally, smoke and equipment from treatment activities may be visible to student researchers and individuals in Camp Ocean Pines at RMR; however, these activities would be temporary and minor. The potential for the project to result in short-term substantial degradation of the visual character of the project area is within the scope of the Program EIR because the proposed treatment activities are consistent with those analyzed in the Program EIR. SPRs applicable to the proposed treatments are AD-4, AES-1, AES-2, AQ-2, and AQ-3. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AES-2

Initial treatments within the CPER and RMR would include the ecological restoration treatment types. Shaded fuel break treatment types would be included only within the RMR. The potential for these treatment types to result in long-term substantial degradation of the visual character of a treatment area was examined in the Program EIR. Viewpoints within and near the project area from which treatments could be visible include residences, as well as viewpoints of CPER from Main Street, Santa Rosa Creek Road, and Covell Ranch, and viewpoints of RMR from SR 1, Camp Ocean Pines, and student researchers when permitted on RMR. There would be no degradation of a scenic vista or damage to scenic resources in a state scenic highway. The long-term visual character and quality of public views after implementation of the proposed ecological restoration and shaded fuel break treatments would remain consistent with the current natural, vegetated landscape and would not constitute a substantial adverse change or degrade the current visual character of the landscape. The potential for the proposed treatment types to result in long-term degradation of the visual character of an area was examined in the Program EIR. The potential for the project to result in long-term substantial degradation of the visual character of the project area is within the scope of the Program EIR because the proposed treatment activities are consistent with those analyzed in the Program EIR. SPRs applicable to the proposed treatments are AD-4, AES-1, and AES-3. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AES-3

This impact does not apply to the proposed project because nonshaded fuel breaks are not proposed.

NEW AESTHETIC AND VISUAL RESOURCE IMPACTS

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.2.1, "Environmental Setting," and Section 3.2.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to aesthetics and visual resources would occur that is not covered in the Program EIR.

4.2 AGRICULTURE AND FORESTRY RESOURCES

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

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Agriculture and Forestry Resource Impacts: Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

IMPACT AG-1

Vegetation treatment activities implemented within the two reserves would include prescribed burning, manual, mechanical, and herbicide treatments to conduct ecological restoration treatments, and within RMR only, also implement the shaded fuel break treatment type. Ecological restoration treatment would focus on thinning small diameter trees up to 8 dbh and larger dead/diseased trees from overstocked forest units to establish mature trees and a healthy forest structure, promote the recruitment of Monterey pines, improve wildlife habitat, and minimize conditions that could lead to catastrophic wildfire and forest type conversion. The creation of a shaded fuel break at RMR would include the thinning of some live trees up to 8 inches dbh and larger dead/diseased trees to reduce fuel continuity and provide for ingress/egress and staging for firefighting, while also maintaining riparian habitat and the majority of the overstory canopy. The potential for these treatment types and treatment activities to result in the loss of forestland or conversion of forestland to nonforest use was examined in the Program EIR. The treatment activities described above would occur in forested lands. Consistent with the Program EIR, the vegetation remaining after treatments would meet the definition of forestland as defined in Public Resources Code Section 12220(g), which defines "forest land" as land that can support 10 percent native tree cover of any species under natural conditions. Therefore, the potential for the project to result in the loss or conversion of forestland is within the scope of the Program EIR. No SPRs are applicable to this impact. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW AGRICULTURE AND FORESTRY RESOURCE IMPACTS

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.3.1, "Environmental Setting," and Section 3.3.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to agriculture and forestry resources would occur that is not covered in the Program EIR.

4.3 AIR QUALITY

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

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

The project area is in the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOAPCD). Pursuant to SPR AQ-2, US-LTRCD and CDFW would prepare a smoke management plan and submit it to SLOAPCD before implementing a prescribed burning treatment, if required. Pursuant to SPR AQ-3, a burn plan would be prepared.

IMPACT AQ-1

Exhaust from vehicles and equipment during initial and maintenance vegetation treatments, fugitive dust emissions from ground disturbance and travel on unpaved roads, and smoke from prescribed burns would result in emissions of criteria pollutants that could exceed California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS) thresholds. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the Program EIR.

Emissions of criteria air pollutants as a result of the proposed project is within the scope of the Program EIR because the size of treatment crews, the types of equipment, and the duration of equipment use would be consistent with those analyzed in the Program EIR. US-LTRCD and CDFW are proposing to implement the emission reduction techniques included in Mitigation Measure AQ-1 to the extent feasible. However, because the treatments would be implemented by public agencies with limited funding, procuring or paying additional amounts for contractors that use equipment meeting the latest efficiency standards, including meeting the EPA's Tier 4 emission standards, using renewable diesel fuel, using electric- and gasoline-powered equipment, and using equipment with Best Available Control Technology may be cost prohibitive. Carpooling would be encouraged by US-LTRCD and CDFW, but because crews may not all be employed with the same company and due to the project's remote location, it may not be feasible for most workers. For these reasons, and as explained in the Program EIR, this impact would remain significant and unavoidable.

When feasible, US-LTRCD and CDFW are proposing use of specialized biomass processing technologies in place of pile burning, pursuant to Mitigation Measure GHG-2. Evaluation of criteria air pollutant emissions from these biomass processing technologies conducted by Ascent (2022) indicates that smoke and criteria air pollutant emissions can be substantially reduced, compared to open pile burning. Use of an air curtain burner would substantially reduce reactive organic gas (ROG) and particulate matter (PM) emissions by approximately 96 percent when compared to pile burning. Carbonization (i.e., use of a biochar kiln) would substantially reduce ROG emissions by approximately 98 percent and PM emissions by 71 percent when compared to pile burning. For nitrous oxide (NO_X), air curtains are estimated to reduce NO_X emissions by at least 73 percent and carbonization using a biochar kiln is estimated to reduce NO_X emissions by approximately 39 percent (Ascent 2022). Based on available information about emissions from specialized biomass processing technologies, these technologies offer the opportunity to substantially reduce local exposure to PM from smoke, a potentially beneficial difference compared to pile burning.

The SPRs applicable to the proposed project are AD-4, SPR AQ-1 through SPR AQ-4, and SPR AQ-6. Despite the substantial reduction in criteria air pollutant emissions afforded by use of these biomass processing technologies, Impact AQ-1 must still be recognized as potentially significant and unavoidable because of uncertainties in the extent of their use. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AQ-2

The use of vehicles and equipment during initial and maintenance vegetation treatments could expose people to diesel particulate matter emissions if present in or immediately adjacent to the project area. The potential to expose people to diesel particulate matter emissions during vegetation treatments was examined in the Program EIR.

Most initial and maintenance treatments would occur in remote portions of CPER and RMR. However, treatments located in the southern portion of CPER and the northern portion of RMR could occur as close as 100 feet from existing sensitive receptors, including residences and hotels. In addition, treatment activities within RMR would occur adjacent to Camp Ocean Pines, a privately-owned children's camp and conference center. SPR AD-4 requires public

notification in advance of treatment activities), and SPR NOI-6 requires notifying sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity of any treatment activities using heavy equipment. Public noticing would be provided prior to implementation of all treatments such that that the public would be aware of nearby treatment activities that may result in diesel particulate matter emissions and can limit their potential exposure. Consistent with the Program EIR, treatment activities would be temporary and intermittent in nature (e.g., initial treatments would take several days to months to complete) and would not take place in the same locations near the same people for an extended period of time. Diesel particulate matter emissions from the proposed treatments are within the scope of the Program EIR because the types and amount of equipment that would be used, as well as the duration of use during proposed treatments, are consistent with those analyzed in the Program EIR. SPRs applicable to this treatment are AD-4, AQ-1, HAZ-1, NOI-4, NOI-5, and NOI-6. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AQ-3

This impact does not apply to the treatment project because naturally occurring asbestos does not occur in the project area based on mapping by the US Geological Survey (USGS 2011) and a reconnaissance-level survey of the project area (see Section 4.,5, "Biological Resources").

IMPACT AQ-4

Prescribed burning during initial and maintenance treatments could expose people to toxic air contaminants (TAC), which was examined in the Program EIR. When feasible, the use of specialized biomass processing technologies is proposed to reduce smoke emissions and associated toxic air contaminants in comparison to pile burning. TACs resulting from the combustion of biomass are generally organic in nature and are, therefore, a subset of ROG emissions. Based on evaluation conducted by Ascent (2022), the proposed use of air curtain burners would reduce ROG emissions by at least 96 percent and the use of carbonators (i.e., biochar kiln) would reduce ROG emissions by approximately 98 percent when compared to pile burning of equivalent areas. Therefore, the exposure of persons to TACs and related health risks would likely be substantially lower with the use of air curtain burners as compared with pile burning.

The duration and parameters of the prescribed burns are within the scope of the activities addressed in the Program EIR, and impacts would be reduced with the use of specialized biomass processing technologies. Therefore, the potential for exposure to toxic air contaminants is also within the scope the Program EIR. SPRs applicable to these treatment activities are AD-4, AQ-2, AQ-3, and AQ-6. All feasible measures to prevent and minimize smoke emissions, as well as exposure to smoke, are included in SPRs. No additional mitigation measures are feasible, and this impact would remain significant and unavoidable, as explained in the Program EIR. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AQ-5

Use of vehicles and mechanical equipment during initial and maintenance treatments could expose people, such as nearby residents and visitors at Camp Ocean Pines, to objectionable odors from diesel exhaust. The potential to expose people to objectionable odors from diesel exhaust was examined in the Program EIR. Consistent with the Program EIR, diesel exhaust emissions would be temporary, would not be generated at any one location for an extended period of time, and would dissipate rapidly from the source with an increase in distance. This impact is within the scope of the Program EIR because equipment and duration of use under the proposed project are consistent with what was analyzed in the Program EIR. SPRs HAZ-1, NOI-4, and NOI-5 are applicable to this treatment. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT AQ-6

Prescribed burning during initial and maintenance treatments could expose people to objectionable odors. The potential to expose people to objectionable odors from prescribed burning was examined in the Program EIR. The use of specialized biomass processing technologies is proposed to reduce smoke emissions and associated odors in comparison to pile burning. When compared to pile burning, the proposed biomass processing technologies would substantially reduce smoke through filtering (i.e., air curtains) or eliminate smoke and associated odors altogether (i.e., pyrolysis through use of carbonators).

The duration and parameters of the prescribed burn and the exposure potential are consistent with the activities addressed in the Program EIR, and smoke would be reduced with the use of specialized biomass processing technologies. Therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the Program EIR. SPRs that are applicable to this treatment project are AD-4, AD-6, AQ-2, AQ-3, and AQ-6. All feasible measures to prevent and minimize smoke odors, as well as exposure to smoke odors, are included in SPRs. No additional mitigation measures are feasible, and this impact would remain significant and unavoidable, as explained in the Program EIR. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW AIR QUALITY IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.4.1, "Environmental Setting," and Section 3.4.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to air quality would occur that is not covered in the Program EIR.

4.4 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

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

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Archaeological, Historical, and Tribal Cultural Resource Impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

Consistent with SPR CUL-1, a records search of the approximately 291-acre project area was conducted at the Central Coast Information Center (CCIC) in October 2022 (CCIC File No.: 22-121). The records search revealed five previously recorded precontact archaeological sites (lithic scatters, groundstone tools, midden). None of the previously recorded sites have been evaluated for California Register of Historical Resources (CRHR) eligibility.

Consistent with SPR CUL-2, an updated Native American contact list was obtained from the Native American Heritage Commission (NAHC). On December 19, 2022 or February 1-2, 2023, letters and/or emails inviting the tribes to consult were mailed to the 14 tribal representatives indicated by NAHC. On January 19, 2023, a representative of the yak tityu tityu yak tiłhini Northern Chumash Tribe responded. The Tribal representative expressed concerns that vegetation

removal and operation of vehicles and equipment could result in damage to cultural resources and sites. In addition, the Tribal representative requested copies of any archaeology reports and research from within the reserves and within a 0.5-mile radius of the reserves. US-LTRCD responded to the Tribal representative on January 19, 2023, to provide clarification regarding the extent of vegetation removal, confirm that a cultural survey report would be shared with the Tribe before treatment activities begin, and to offer an on-site meeting with the Tribe. No further response from the Tribe was received as of March 3, 2023. Two responses were received from representatives of the Barbereno/Ventureno Band of Mission Indians on February 1, 2023, indicating that the project proponent should "defer to local tribes." No other tribes responded. A June 30, 2022, search of NAHC's sacred lands database returned positive results.

IMPACT CUL-1

Proposed treatment activities include prescribed burning and mechanical treatments, which could damage historical resources. The CCIC records search did not reveal any built-environment features; nevertheless, structures (i.e., buildings, bridges, roadways) over 50 years old that have not been recorded or evaluated for historical significance may be present in the project area. These structures would be identified and avoided pursuant to SPR CUL-7. The potential for these treatment activities to result in disturbance, damage, or destruction of built-environment structures that have not yet been evaluated for historical significance was examined in the Program EIR. This impact is within the scope of the Program EIR, because treatment activities and the intensity of ground disturbance of the treatment project are consistent with those analyzed in the Program EIR. SPRs applicable to this impact are CUL-1, CUL-7, and CUL-8. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT CUL-2

Vegetation treatment would include the use of heavy equipment that could churn up the surface of the ground during treatment as vegetation is removed (e.g., mechanical treatment activities); these activities may result in damage to known or previously unknown archaeological resources. The CCIC records search revealed five previously recorded precontact archaeological sites (lithic scatters, groundstone tools, midden). None of these sites have been evaluated for eligibility for listing in the CRHR. Therefore, it is not known whether the sites are considered resources under CEQA. A survey would be conducted before treatment pursuant to SPR CUL-4 to identify any previously unrecorded archeological sites and identified resources would be avoided according to the provisions of SPR CUL-5.

The potential for these treatment activities to result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources during vegetation treatment was examined in the Program EIR. This impact was identified as significant and unavoidable in the Program EIR because of the large geographic extent of the treatable landscape and the possibility that there could be some rare instances where inadvertent damage of unknown resources may be extensive. For the Cambria Reserves Restoration and Vegetation Treatment Project, SPRs and Mitigation Measure CUL-2 require identification and protection of resources, and it is reasonably expected that implementation of these measures would avoid a substantial adverse change in the significance of any unique archaeological resources or subsurface historical resources. However, because the project could result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources, it would contribute to the environmental significance conclusion in the Program EIR; therefore, for purposes of CEQA compliance, this PSA notes the impact as potentially significant and unavoidable.

This impact is within the scope of the Program EIR, because treatment activities and intensity of ground disturbance of the treatment project are consistent with those analyzed in the Program EIR. SPRs applicable to this impact include CUL-1 through CUL-5 and CUL-8. Mitigation Measure CUL-2 also applies to this treatment to protect any inadvertent discovery. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT CUL-3

Native American contacts in San Luis Obispo County were contacted on December 19, 2022 or February 1-2, 2023, and included Patrick Tumamait, Barbareno/ Ventureno Band of Mission Indians; Brenda Guzman, Barbareno/ Ventureno Band of Mission Indians; Annette Ayala, Barbareno/ Ventureno Band of Mission Indians; Julie Tumamait-Stenslie, Chairperson, Barbareno/Ventureno Band of Mission Indians; Julio Quair, Chairperson, Chumash Council of Bakersfield; Violet Walker, Chairperson, Northern Chumash Tribal Council; Patti Dunton, Tribal Administrator, Salinan Tribe of Monterey, San Luis Obispo Counties; San Luis Obispo County Chumash Council; Neil Peyron, Chairperson, Tule River Indian Tribe; Joey Garfield, Tribal Archaeologist, Tule River Indian Tribe; Kerri Vera, Environmental Department, Tule River Indian Tribe; Karen White, Chairperson, Xolon-Salinan Tribe; Donna Haro, Tribal Headwoman, Xolon-Salinan Tribe; and Mona Tucker, Chairperson, yak tityu yak tiłhini – Northern Chumash Tribe. The outcome of the tribal outreach, summarized under the "Discussion" section above, did not identify any proposed changes to the project or mitigation measures.

Vegetation treatment would include prescribed burning, manual and mechanical treatment, and the use of herbicides that could inadvertently damage or destroy tribal cultural resources if they are present in treatment areas. The potential for the proposed treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource during implementation of vegetation treatment was examined in the Program EIR. This impact is within the scope of the Program EIR, because the treatment types and intensity of ground disturbance and other vegetation treatment activities proposed for this treatment project are consistent with those analyzed in the Program EIR. As explained in the Program EIR, while tribal cultural resources may be identified within the treatable landscape during development of later treatment projects, implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource. SPRs applicable to this impact include CUL-1 through CUL-6 and CUL-8. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT CUL-4

Vegetation treatment activities would include treatments using heavy equipment; these treatments may use equipment such as masticators and tracked chippers, which could uncover human remains if present in a treatment area. The CCIC records search did not reveal any known burials or sites containing human remains, but an inadvertent discovery could occur. The potential for treatment activities to uncover human remains was examined in the Program EIR. This impact is within the scope of the Program EIR, because the intensity of ground disturbance under the proposed project is consistent with what was analyzed in the Program EIR. In addition, consistent with the Program EIR, the proposed project would comply with California Health and Safety Code Sections 7050.5 and Public Resources Code Section 5097 in the event of a discovery. No SPRs are applicable to this impact. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCE IMPACTS

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities considered in the CalVTP Program EIR. US-LTRCD and CDFW have considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.5.1, "Environmental Setting," and Section 3.5.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur that is not covered in the Program EIR.

4.5 BIOLOGICAL RESOURCES

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTSM	Impact BIO-1, pp 3.6-131 – 3.6-138	Yes	AQ-3 AQ-4 BIO-1 BIO-2 BIO-7 BIO-9 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HYD-5	BIO-1a BIO-1b	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTSM (all wildlife species except bumble bees) SU (bumble bees)	Impact BIO-2, pp 3.6-138 – 3.6-184	Yes	BIO-1 BIO-2 BIO-3 BIO-4 (RMR only) BIO-8 BIO-10 HAZ-5 HAZ-6 HYD-1 HYD-4 HYD-5	BIO-2a BIO-2b BIO-2g BIO-3a BIO-4	LTSM for bumble bee habitat function; TSE for direct harm to bumble bee species; LTSM for other species	No	Yes
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation That Leads to Loss of Habitat Function	LTSM	Impact BIO-3, pp 3.6-186 – 3.6-191	Yes	BIO-1 BIO-2 BIO-3 BIO-4 (RMR only) BIO-6 BIO-8 BIO-9 HYD-4 HYD-5	BIO-3a	LTSM	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTSM	Impact BIO-4, pp 3.6-191 – 3.6-192	Yes	BIO-1 HYD-1 HYD-4	BIO-4	LTSM	No	Yes

Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTSM	Impact BIO-5, pp 3.6-192 – 3.6-196	Yes	BIO-1 BIO-3 BIO-4 (RMR only) BIO-10 HYD-1 HYD-4	BIO-5	LTSM	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197 – 3.6-198	Yes	BIO-1 BIO-2 BIO-3 BIO-4 (RMR only) BIO-12	NA	LTS	No	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	NI	Impact BIO-7, pp 3.6-198 – 3.6-199	Yes	AD-3	NA	NI	No	Yes
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	NI	Impact BIO-8, pp 3.6-199 – 3.6-200	No	--	--	--	--	--

Notes: LTS = less than significant; LTSM = less than significant with mitigation; NI = no impact; SU = significant and unavoidable; TSE = too speculative for evaluation, per CEQA Guidelines Section 15145; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

Pursuant to SPR BIO-1, Ascent biologists conducted a data review of project-specific biological resources, including habitat and vegetation types, and special-status plants, special-status wildlife, and sensitive habitats (e.g., sensitive natural communities, wetlands) with potential to occur in the project area. Habitat and vegetation types in the project area were identified using data modeled by CAL FIRE Fire and Resource Assessment Program (FRAP). CAL FIRE FRAP vegetation data is classified according to California Wildlife Habitat Relationships (CWHR) system of habitat classification. The FRAP vegetation layer is developed from various data sets representing the best available land cover data for each region of the state. Data from these various sources are then converted to CWHR habitat types and merged into a single statewide vegetation layer. This layer was primarily used to identify the habitat and

vegetation types present within the project area. The total acreage of each CWHR type in the project area is presented in Tables 4.5-1 (for CPER) and 4.5-2 (for RMR).

Table 4.5-1 Habitat Types in the Cambria Pines Ecological Reserve Treatment Area

Habitat Type	Ecological Restoration	Total Acreage
Forest/Woodland		
Closed-Cone Pine-Cypress	75.7	**75.7**
Montane Hardwood-Conifer	8.2	**8.2**
Forest/Woodland Total	–	***83.8***
Shrub/Scrub		
Coyote Brush Scrub	3.9	**3.9**
Shrub/Scrub Total	**–**	***3.9***
Herbaceous		
Annual Grassland	16.1	***16.1***
Herbaceous Total	**–**	***16.1***
All Habitat Types Total	–	**103.9**

Source: CAL FIRE FRAP vegetation data, compiled by Ascent in 2022.

Table 4.5-2 Habitat Types in the Rancho Marino Reserve Treatment Area

Habitat Type	Shaded Fuel Break	Ecological Restoration	Total Acreage
Forest/Woodland			
Closed-Cone Pine-Cypress	16.1	159.3	**175.4**
Forest/Woodland Total	–	–	***175.4***
Herbaceous			
Annual Grassland	0.9	9.6	**10.5**
Herbaceous Total	**–**	**–**	***10.5***
Wetland/Riparian			
Lacustrine	0	1.0	**1.0**
Wetland/Riparian Total	**–**	**–**	***1.0***
Developed/Disturbed/Barren[1]			
Barren	0.1	0	**0.1**
Developed/Disturbed/Barren Total	–	–	***0.1***
All Habitat Types Total	–	–	**187.0**

[1] Most urban and barren habitats would not be targeted for treatment; however, due to the scale of the habitat mapping, some areas mapped as urban or barren may contain habitats that would be treated (e.g., forested areas close to urban development).

Source: CAL FIRE FRAP vegetation data, compiled by Ascent in 2022.

Ascent conducted a reconnaissance-level survey of the CPER and RMR treatment areas pursuant to SPR BIO-1 on April 19 and 20, 2022. The project area is in the Central California Coast ecoregion. The CPER treatment area ranges in elevation from approximately 200 feet to 400 feet, and the RMR treatment area ranges from approximately 85 feet to 590 feet in elevation.

A list of special-status plant and wildlife species with potential to occur in the project area was compiled by completing a review of the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records for the following US Geological Survey (USGS) quadrangles containing and surrounding the project area (i.e., Cayucos, Cypress Mountain, Lime Mountain,

Pico Creek, Cambria, Pebblestone Shut-in, and San Simeon quadrangles) (CNDDB 2022a; CNPS 2022), Appendix BIO-3 (Table 1a, Table 1b, and Table 19) in the CalVTP Final Program EIR (Volume II), Calflora occurrence data (Calflora 2022), Cambria Pines Ecological Reserve Plant List (Butterworth 2022), and Rancho Marino Reserve Plant Lists (Wahlert, pers. comm., 2022). A list of sensitive natural communities with potential to occur in the project area was compiled by reviewing the CWHR types mapped in the project area using the FRAP vegetation layer, assessing community composition during the reconnaissance surveys, completing a CNDDB search of the USGS quadrangles containing and surrounding the project area (CNDDB 2022a), and reviewing Table 3.6-3 (pages 3.6-25 through 3.6-27) in the CalVTP Final Program EIR (Volume II) for sensitive natural communities that could occur in the Sierra Nevada ecoregion in the habitat types mapped in the project area. In addition, vegetation rapid assessments were conducted in 2022 at CPER by CDFW and CNPS staff (Hacker, pers. comm., 2022). The rapid assessment protocol is a reconnaissance-level method of vegetation and habitat sampling that may be used to quickly assess and map the extent of all vegetation types in relatively large, ecologically defined regions (CNPS 2007). The vegetation rapid assessments conducted at CPER identified the following alliances and associations: *Pinus radiata-Quercus agrifolia*, heavy; *Pinus radiata-Quercus agrifolia*; *Pinus radiata-Quercus agrifolia/Baccharis pilularis-Toxicodendron diversilobum*; *Pinus radiata-Quercus agrifolia/Baccharis pilularis/Stipa pulchra*; *Quercus agrifolia-Pinus radiata*; *Baccharis pilularis-Toxicodendron diversilobum*; and *Danthonia californica* (Hacker, pers. comm., 2022).

During the reconnaissance survey on April 19 and 20, 2022, Ascent identified and documented sensitive resources (e.g., aquatic habitat, riparian habitat, sensitive natural communities) and assessed the suitability of habitat in the project area for special-status plant and wildlife species. Mapped habitat types were verified or corrected (e.g., coyote brush scrub was added at CPER) where possible and incidental wildlife observations were recorded. Based on the reconnaissance survey and the refined vegetation mapping conducted at CPER, habitat mapped as annual grassland at both CPER and RMR would qualify as coastal prairie. Prairie is defined as a treeless plain dominated by grasses and forbs found in moderately dry temperate regions (California's Coastal Prairies 2022). The term coastal prairie is used to describe California north and central coast grasslands with proximity to the coast and having marine influences (i.e., plants obtain some moisture from fog). Coastal prairies support higher plant diversity than other grasslands and native forb species are often dominant (California's Coastal Prairies 2022). Three major vegetation types of coastal prairie have been characterized: California annual grassland (dominated by ripgut brome and wild oat), California oatgrass (which contains three subtypes), and moist native perennial grassland (dominated by meadow barley, brown-headed rush, and various sedge species) (Ford and Hayes 2007). California oatgrass was identified at CPER during the vegetation rapid assessments. Wild oat dominated grassland areas were observed at CPER and ripgut brome dominated grassland areas were observed at RMR during the reconnaissance surveys.

Based on implementation of SPR BIO-1, including review of occurrence data, species ranges, habitat requirements for each species, results of reconnaissance-level surveys, and habitat present within the project area as assessed during reconnaissance surveys, Ascent assembled a complete list of all special-status plant and wildlife species with potential to occur in the vicinity of the proposed project. This complete species list along with genus and species names, federal and state listing status, and potential to occur within the project area is contained in Attachment C. A total of 13 special-status plant and 13 special-status wildlife species are known to occur or were determined to have the potential to occur in the project area (Attachment C). Special-status species with potential to occur in the project area are discussed in detail under Impact BIO-1 (special-status plants) and Impact BIO-2 (special-status wildlife).

IMPACT BIO-1

Initial vegetation treatments and maintenance treatments at CPER could result in direct or indirect adverse effects on the three special-status plants that are known to occur or are likely to occur on that reserve (i.e., La Cruz Manzanita, Santa Lucia bush-mallow [*Malacothamnus palmeri* var. *palmeri*], and Monterey pine). Initial and maintenance treatments at RMR could result in direct or indirect adverse effects on special-status plant species known or with potential to occur within suitable habitat in the reserve (Attachment C). Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments for grassland, shrubland, and forested communities because the same treatment activities would occur, and treatment would mimic the natural fire return interval. However, treatment frequency and intensity can determine whether effects on certain plant species are beneficial or adverse.

Initial treatment that reduces overgrowth of competing vegetation, opens the tree canopy to allow more light penetration, or removes invasive competitors can be beneficial for some special-status plant populations; however, repeated treatments at too frequent intervals can have adverse effects on those same special-status plants. In particular, if retreatment occurs in Monterey pine (*Pinus radiata*) communities at frequencies outside the natural fire return interval, Monterey pine and other special-status plants associated with this community type could be adversely affected through habitat alteration that makes the habitat unsuitable for their growth and reproduction. The potential for treatment activities to result in adverse effects on special-status plants was examined in the Program EIR.

SPR BIO-7 would not apply to initial treatment activities on CPER, because the locations of La Cruz manzanita and Santa Lucia bush-mallow in the treatment area have been mapped (Hacker pers. comm., 2023b), and because Monterey pine is known to occur and would be subject to removal to benefit its habitat, as described below. However, SPR BIO-7 would apply to maintenance treatments on CPER and special-status plant surveys may be required on CPER prior to maintenance treatments, pursuant to SPR BIO-7; species that are currently not found may be present during future maintenance activities because the habitat may be more suitable following initial treatments. SPR BIO-7 would apply to all treatment activities, including maintenance treatments, on RMR, and protocol-level surveys for special-status plants would be conducted pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018, or current version) prior to implementing prescribed burning, mechanical treatment, manual treatment, and herbicide treatments in any habitat potentially suitable for special-status plants. In Monterey pine habitat, surveys would be required within 5 years of treatment activities. Pursuant to the CDFW protocol, surveys in grassland habitat should be conducted annually. Pursuant to SPR BIO-7, surveys would not be required for those special-status plants not listed under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), if the target special-status plant species is an herbaceous annual species, stump-sprouting species, or geophyte species, and the specific treatments may be carried out during the dormant season for that species or when the species has completed its annual life cycle, provided the treatment would not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment, or destroy seedbanks, stumps, or roots, rhizomes, bulbs and other underground parts of special-status plants. However, this would require that treatments in habitat potentially suitable for these special-status plants be restricted to the dormant season for these species and to treatments that do not disturb below the soil surface (i.e., manual treatments, herbicide application, and prescribed burning) without prior knowledge of their presence, which may unnecessarily or infeasibly constrain treatment implementation. In this case, surveys could be conducted to determine presence or absence and, depending on the results, may provide greater flexibility in terms of the timing and types of treatments that may be implemented.

Four of the special-status plant species that are known to or may occur within the project area are herbaceous annual species or geophytes, as indicated in Attachment C. Impacts on these species would be avoided by applying only treatment activities that do not kill or remove vegetation or disturb the soil below the surface (i.e., manual treatment, herbicide application, and prescribed burning) and carrying out these treatments only during the dormant season (i.e., when the plant has no aboveground living parts), which would typically occur after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inch), and cold snap, which generally occurs between October–December (Levine et al. 2008). Control lines for prescribed burning would have to be created outside of potential habitat for special-status plants or the proposed control line areas would need to be surveyed for special-status plants, including annual species, stump-sprouting species, or geophyte species, prior to installing any control lines. Treatment activities that could potentially kill or remove seeds, stumps, and underground root structures (i.e., mechanical treatments) may result in impacts on these plant species even when dormant and would not be conducted in potential habitat for these species without prior implementation of SPR BIO-7 to determine if they are present. If treatment activities would not be limited to those that do not kill or remove vegetation or disturb the soil below the surface (e.g., manual treatments, herbicide application, and prescribed burning) or treatments cannot be completed in the dormant season and would be implemented during the growing period of annual and geophyte species, protocol surveys (per SPR BIO-7) and avoidance of any identified special-status plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented, as described below. The remaining special-status plant species that have potential to occur within the project area are perennial species, which could not be avoided seasonally in the same

manner as herbaceous annual species, stump sprouters, or geophytes; therefore, protocol-level surveys under SPR BIO-7 would be necessary to identify them prior to implementing treatment activities regardless of the timing of treatments.

Where protocol-level surveys are required (pursuant to SPR BIO-7) and special-status plants are identified during these surveys, Mitigation Measures BIO-1a or BIO-1b, depending on species status, will be implemented to avoid loss of identified special-status plants. Pursuant to Mitigation Measures BIO-1a and BIO-1b, if special-status plants are identified during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which prescribed burning, mechanical treatment, manual treatment, and herbicide application will not occur unless a qualified RPF or biologist determines, based on substantial evidence, that the species would benefit from the proposed treatment in the occupied habitat area. Control lines and burn piles for prescribed burning would not be sited in areas known to support special-status plants. In the case of plants listed pursuant to ESA or CESA, the determination of beneficial effects will need to be made in consultation with CDFW and/or USFWS, depending on species status. If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, under the specific conditions described under Mitigation Measures BIO-1a and BIO-1b, additional impact minimization and avoidance measures or design alternatives to reduce impacts will be identified. An evaluation of the appropriate treatment design and frequency to maintain habitat function for special-status plants will be carried out by a qualified RPF or botanist. Therefore, habitat function for special-status plants will be maintained because treatment activities and maintenance treatments will be designed to ensure that treatments, including follow-up maintenance treatments, maintain habitat function for the special-status plant species present.

In addition, pursuant to SPR HYD-5, nontarget vegetation and special-status species would be protected from herbicides. Only ground-level application would occur (no aerial spraying). Only herbicides labeled for use in aquatic environments would be used when working in areas where there is a possibility the herbicide could come into direct contact with water. Herbicides would be applied by hand and only during low-flow periods or when seasonal streams are dry. Herbicides, aquatic and terrestrial, would not be utilized within WLPZs or ELZs (established per SPR HYD-5), which would incorporate the riparian habitat of Strawberry Creek within RMR (see Section 2.3.2, "Rancho Marino Reserve Treatment Activities").

Special-Status Plants Known to Occur in the Project Area

Floristic surveys have been conducted throughout the CPER by local botanist George Butterworth over multiple years, including in 2022 (Hacker pers. comm., 2023b). Three special-status plant species—La Cruz manzanita, Santa Lucia bush-mallow, and Monterey pine—have been documented within the CPER treatment area over the course of these floristic surveys. La Cruz manzanita and Monterey pine were observed during the reconnaissance survey in 2022, and Santa Lucia bush-mallow was detected in the treatment area following the reconnaissance survey (Hacker pers. comm., 2023b). One special-status plant species—Monterey pine—is known to occur within the RMR treatment area. Therefore, implementation of Mitigation Measure BIO-1b will be required on CPER and RMR to avoid loss of individual plants. Any other perennial special-status plants found during the surveys conducted under SPR BIO-7, would be protected by establishing a no-disturbance buffer around the area occupied by the special-status plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers would generally be a minimum of 50 feet around special-status plant occurrences. For geophytic species, treatments may be conducted within the no-disturbance buffer outside of the growing season (e.g., after species has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the underground parts of special-status plants or destroy the seedbank. Additional information is provided below on La Cruz manzanita, Monterey pine, and Santa Lucia bush-mallow, three special-status plants known to occur, because treatment activities would occur within the no-disturbance buffers for these species but the species would benefit from the treatments, and habitat function would improve with implementation of the treatments. Pursuant to Mitigation Measure BIO-1a and Mitigation Measure BIO-1b, impacts on special-status plants must be avoided unless it is determined that the plants would benefit from treatment and that habitat function would improve with implementation of the treatment.

La Cruz Manzanita

La Cruz manzanita is a special-status plant species (see Attachment C) that is known to occur in the CPER treatment area. Manual and prescribed burning treatments in closed-cone pine cypress (i.e., Monterey pine) habitat that contains this species are proposed.

La Cruz manzanita is an obligate seeder, meaning it reproduces only from seed and does not resprout from a burl or root crown following fire or cutting. This species is killed outright by fire and must regenerate from a persistent soil seed bank (Elkhorn Slough 2017). Minimal fire effect and regeneration information is available for La Cruz manzanita, but studies on Morro manzanita (*Arctostaphylos morroensis*), a close relative of La Cruz manzanita, determined that it may take longer than 40 years to establish a resilient seedbank. Typically, in obligate seeding manzanita species, dormant seeds stored deep in a persistent seed bank are stimulated to sprout by chemical compounds in smoke caused by fire (Parker 2007). Seedlings of obligate seeding manzanita species are generally not shade tolerant and rely on fire to create openings and bare mineral soil to reestablish. Although La Cruz manzanita in the treatment area is associated with Monterey pine, this species is found as part of maritime chaparral, grassland, and coastal scrub habitats in the other locations where it occurs. Maritime chaparral is typically found in association with closed-cone forests of the immediate coast, including those dominated by *P. radiata*, *P. muricata*, *Hesperocyparis abramsiana*, or *H. macrocarpa* (Parker 2007) and thus expresses similar positive fire responses. Obligate seeders in maritime chaparral generally have a longer fire return interval than obligate seeders in interior chaparral (Elkhorn Slough 2017). Therefore, it is assumed that La Cruz manzanita has a natural fire return interval of approximately 35–100 years, similar to other obligate seeders that occur in maritime chaparral, even though chaparral communities are not present in the treatment area. According to CAL FIRE, only two very small fires have burned recently in the CPER treatment area and there are no documented large fires since the 1950s, when the data was first collected. Because obligate seeding manzanita species like La Cruz manzanita are fire-adapted or fire-dependent and rely on the bare mineral soil conditions, openings in tree canopy cover, and biochar or smoke stimulus provided by fire for successful regeneration, this species would benefit from fire and other vegetation treatments that create openings, reduce competition, and create smoke and biochar that stimulate seed germination. Pursuant to Mitigation Measure BIO-1b, pile burning would not be carried out within 50 feet of La Cruz manzanita plants because piles burn hot enough to kill seeds in the soil bank and could scorch live manzanita plants; however, broadcast burning within approximately 5 feet of La Cruz manzanita plants would provide beneficial effects for these plants by eliminating competitors and stimulating germination. The final buffer size would be determined by a qualified biologist or RPF based on site-specific conditions (e.g., fuel loading around the La Cruz manzanita); the buffer would protect individual manzanita plants from burning or scorching during broadcast burning while also allowing stimulation of the seed bank.

Manual treatments are proposed in areas occupied by this species, but individual plants would be avoided. Although Mitigation Measure BIO-1b will require establishing a minimum 50-foot no-disturbance buffer around the area occupied by the La Cruz manzanita, exceptions to this buffer are proposed for manual treatments immediately adjacent to individual shrubs to remove other plant species (including Monterey pine saplings and poles) that are growing up through manzanita plants. La Cruz manzanita occurs mostly in maritime chaparral and more open habitats at other locations. Within CPER, it occurs in the more open areas of Monterey pine habitat (see Section 2.2.1 for additional detail on La Cruz manzanita within CPER). Previous studies have found that obligate seeder manzanita species occupy more open habitat and that these openings may provide areas for post-fire seedling recruitment (Elkhorn Slough 2017). Thinning trees and tree limbs around manzanitas would promote healthier and more resilient stands of La Cruz manzanita by reducing density and competition with other species and providing preferred open habitat.

Monterey Pine

Monterey pine is a special-status plant species with a California Rare Plant Rank of 1B.1 (see Attachment C) and is known to occur in the CPER and RMR treatment areas. It is the dominant species in closed-cone pine cypress (i.e., Monterey pine) habitat in the area. Manual, mechanical, and prescribed burning treatments in closed-cone pine cypress habitat are proposed and would specifically target Monterey pine. Much of the Monterey pine habitat at CPER and throughout the treatment area at RMR has not had a large fire for at least 70 years and is outside the natural fire return interval of 11 to 20 years. Many trees are affected by disease, including western gall rust (*Peridermium harknessii*), mistletoe, and pine pitch canker (*Fusarium circinatum*), and the Monterey pine stands are

relatively dense at both treatment areas. The Monterey pine at CPER is in a mixed age stand with patches of even aged, younger trees (see Section 2.2.1 for additional details on Monterey pine in the CPER treatment area). The Monterey pine forest at RMR is composed of relatively even-aged trees.

Monterey pine has an intermediate shade tolerance and becomes less shade tolerant as the tree matures. It obtains optimal growth in full sunlight (Cope 1993). Generally, natural stands of Monterey pine are mixed age classes, but size distribution is skewed based on the last fire (Piirto and Valkonen 2005). Monterey pine can survive low intensity fire if it is not a crown fire. Crown fires in dense stands kill young Monterey pine trees. Reproduction rates are greatest after a fire if the parent trees survive. The optimal seedbed for Monterey pine is bare mineral soil, such as that created by fire (Hayes et al. 2007) but regeneration can also occur after disturbance such as clearing or logging (Cope 1993). Maximum seed production is achieved once Monterey pine individuals are 1 or 2 decades old (Hayes et al. 2007). Monterey pine also regenerates through regular release of seeds that occurs most years and is based on temperature and humidity. More seeds are released during warm, dry weather (Cope 1993; Piirto and Volkonen 2005).

Treatments are proposed in Monterey pine habitat to maintain (or in the case of RMR, encourage) mixed age stands, encourage recruitment, and enhance regeneration of Monterey pine, and promote and maintain a healthy, resilient stand. Manual and mechanical treatments are proposed to remove live Monterey pines less than 8 inches dbh and trees that are dead, in irreversibly poor condition, or a safety hazard in all age classes in both treatment areas. Within CPER, individual irreversibly diseased or dying, mature Monterey pines may also be removed if they occur in even age stands where pine recruitment is low. Removal of mature unhealthy Monterey pine trees within CPER would allow for openings that would increase sun exposure and help increase recruitment of Monterey pine and would help maintain an uneven aged stand. In general, Monterey pines that are a hazard, heavily diseased, or dead would be prioritized for removal within both treatment areas. Decreasing the density of Monterey pine through removal of smaller trees would encourage recruitment. Maximum seed production of Monterey pine occurs when stands have an open tree canopy (Cope 1993). In addition, decreasing the density of the stand would promote a more resilient forest, thereby decreasing the risk of high severity and crown fire and increasing the chance of individual trees surviving a low to moderate severity fire. Reducing understory Monterey pine density (along with removal of entire plants and limbs of other shrub and tree species) would also allow prescribed low intensity ground fire to be conducted at both treatment areas to help promote regeneration. An initial prescribed burn within both treatment areas would be within the normal fire return interval of 11 to 20 years. No maintenance prescribed burning treatments in Monterey pine stands would occur in these areas prior to a minimum of 11 years since the last burn (pursuant to Mitigation Measure BIO-1b).

In addition, reducing the density of Monterey pine (along with removal of some oaks) would reduce competition in the lower and mid canopy where oak competition is more prevalent. Reducing the competition with oak trees would help prevent the conversion of Monterey pine dominated habitat to oak dominated habitat, which is a succession that occurs in absence of fire. A study on the Monterey pine stand at Año Nuevo found that treatments that reduce stand density and favor mid to small diameter Monterey pine trees over other species and large Monterey pine trees seem most appropriate when aiming to promote the sustainability of Monterey pine (Piirto and Volkonen 2005). Therefore, direct removal of Monterey pine as part of treatments would benefit Monterey pine by encouraging regeneration, maintaining a mixed age stand at CPER, and increasing the potential for a mixed aged stand to develop at RMR, and habitat function in Monterey pine stands would improve with implementation of treatments through increased health and resiliency. This is consistent with Mitigation Measure BIO-1b, which states that impacts on special-status plants must be avoided unless it is determined that the plants would benefit from treatment and that habitat function would improve with implementation of the treatment.

Removal of live, healthy, non-hazard sapling and young Monterey pine trees is also proposed in the coastal prairie habitat within CPER. Monterey pine, along with coyote brush, is invading the coastal prairie habitat. Coastal prairie habitat is a high quality, rare habitat type that supports high plant diversity (see Section 2.2.1, "Coastal Prairie," for further discussion). In addition, coastal prairie is a legacy sensitive natural community and although herbaceous alliances that would qualify as sensitive natural communities have not been identified in this habitat to date (see Section 4.5, Impact BIO-3 for further discussion on sensitive natural communities), there is potential for sensitive natural communities to occur in this habitat. Therefore, removal of Monterey pine trees would help preserve this habitat type at CPER by preventing the loss of coastal prairie through habitat conversion facilitated by Monterey pine

encroachment. Because proposed treatments in Monterey pine stands would benefit Monterey pine and result in increased regeneration and a healthier and more resilient Monterey pine stand, as detailed above, loss of some individuals within coastal prairie habitat, would not substantially negatively affect Monterey pine.

Santa Lucia Bush-Mallow

Santa Lucia bush-mallow is a shrub species with a California Rare Plant Rank of 1B.2 and is known to occur in the CPER treatment areas. It has potential to occur in the RMR treatment areas, though it has not been detected there previously.

Plants in the *Malacothamnus* genus are fire-following shrubs that can regenerate from root sprouts in mild fires or by seedling germination in areas cleared by fire. Altered fire regimes (too frequent fires and fire suppression policies) have contributed to the declines in plant population sizes and historical range of *Malacothamnus* species (Los Padres Forestwatch 2013). Therefore, prescribed burns must be implemented at the appropriate fire return frequency of the vegetation alliance the species is growing in to avoid adverse effects on the population. The Santa Lucia bush-mallow at CPER is growing in Monterey pine forest and would be treated at the same fire return interval as the Monterey pine forest of 11 to 20 years. Much of the Monterey pine habitat at CPER and throughout the treatment area at RMR has not had a large fire for at least 70 years and is outside the natural fire return interval of 11 to 20 years. Because *Malacothamnus* species are fire-followers, it is expected that Santa Lucia bush-mallow would benefit from treatment and that the population at CPER may expand after treatment. Following initial treatment, prescribed burn maintenance treatments in Monterey pine stands containing Santa Lucia bush mallow would not occur during maintenance activities until the treatment areas are outside the minimum fire return interval of 11 years.

Pursuant to Mitigation Measure BIO-1b, pile burning would not be carried out within 50 feet of Santa Lucia bush-mallow plants because piles burn hot enough to kill seeds in the soil bank and could scorch live bush-mallow shrubs; however, broadcast burning within approximately 5 feet of Santa Lucia bush-mallow plants would provide beneficial effects for these plants by eliminating competitors, stimulating germination, and exposing bare mineral soil on which new seedlings can establish. The final buffer size would be determined by a qualified biologist or RPF based on site-specific conditions (e.g., fuel loading around the Santa Lucia bush-mallow plants); the buffer would protect individual Santa Lucia bush-mallow plants from burning or scorching during broadcast burning while also allowing stimulation of the seed bank. Manual treatments are also proposed in areas occupied by this species, but individual plants would be avoided. Although Mitigation Measure BIO-1b will require establishing a minimum 50-foot no-disturbance buffer around special-status plants, exceptions to this buffer are proposed for manual treatments immediately adjacent to individual Santa Lucia bush-mallow shrubs to remove other plant species (including Monterey pine saplings and poles) that are shading this species.

Conclusion

The potential for treatment activities to result in adverse effects on special-status plants was examined in the Program EIR. This impact on special-status plants is within the scope of the Program EIR, because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the Program EIR. Biological resource SPRs that apply to project impacts under Impact BIO-1 are SPRs AQ-3, AQ-4, BIO-1, BIO-2, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, and HYD-5. Biological resource mitigation measures that apply to project impacts under Impact BIO-1 are Mitigation Measure BIO-1a and Mitigation Measure BIO-1b. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-2

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

California Red-Legged Frog

Studies have demonstrated that California red-legged frogs remain very close to breeding habitat during the breeding season and typically do not move more than approximately 300 feet into upland habitats (Bulger et al. 2003; Fellers and Kleeman 2007). However, adult and juvenile California red-legged frog are known to travel through upland habitat (e.g., riparian, woodland, grassland) to move between breeding and nonbreeding sites (e.g., other ponds, deep pools in streams, moist and cool riparian understory, burrows) for access to refugia and foraging habitat, or to disperse to new breeding locations. During migration, California red-legged frogs may travel long distances from aquatic habitat, typically travel in straight lines irrespective of vegetation types, and have been documented to move over 1.7 miles between aquatic habitat sites (Bulger et al. 2003).

CPER. California red-legged frog has been documented to occur in multiple locations in and around Cambria (CNDDB 2022a) including Santa Rosa Creek, which is located within 1.7 miles of CPER. Due to its location near Santa Rosa Creek, the treatment area within CPER contains upland dispersal habitat suitable for dispersing California red-legged frogs; however, there are no aquatic features on or within 300 feet of CPER that provide breeding or nonbreeding aquatic habitat suitable for California red-legged frog. Although breeding or nonbreeding habitat is not present on CPER, injury or death of California red-legged frog from mechanical treatment, manual treatment, herbicide application, and prescribed burning would not be completely avoided on CPER because of the presence of upland dispersal habitat within the reserve.

RMR. Upland habitat and potential breeding and nonbreeding aquatic habitat for California red-legged frog is present within treatment areas on RMR. While surveys for tree frogs conduced at the pond within the treatment area did not detect any California red-legged frogs (Seydel, pers. comm., 2022), the presence of the species within the pond and the RMR treatment area cannot be ruled out, because the survey for tree frogs did not focus on California red-legged frogs and the pond is within dispersal distance of other potential breeding habitat. Therefore, California red-legged frog has potential to occur throughout the treatment area. WLPZs of 50 to 100 feet from any Class II stream (other than Strawberry Creek where the WLPZ would be 75 feet) and 75 to 150 feet adjacent to the pond (Class I) would be implemented within the RMR treatment area per SPR HYD-4, which prohibits driving heavy equipment, equipment fueling, placement of burn piles, and fire ignition within these buffers. However, the species may be present within upland habitat greater than the WLPZ width of Class II streams and the pond in the RMR treatment area year-round. In addition, treatment activities would be implemented in compliance with state water quality regulations pursuant to SPR HYD-1, which would further protect potential aquatic habitat. These prohibitions would reduce impacts on California red-legged frog on RMR; however, injury or death of California red-legged frog from mechanical treatment, manual treatment, herbicide application, and prescribed burning would not be completely avoided on RMR because the species is known to occur farther than 50 to 150 feet from aquatic habitat. In addition, manual activities implemented within the WLPZ and following rainfall events may result in adverse effects on California red-legged frogs.

The potential for treatment activities and maintenance treatments to result in adverse effects on California red-legged frog was examined in the Program EIR. Per SPR BIO-1, all adverse effects cannot be clearly avoided, and SPR BIO-10 would apply. Known detections of California red-legged frog and breeding habitat potentially suitable for the species occur outside of the CPER and RMR treatment areas and within the dispersal distance of California red-legged frog; therefore, pursuant to SPR BIO-10, protocol surveys following the guidelines provided by USFWS (2005) would be conducted, or presence of California red-legged frog would be assumed within the project area and Mitigation Measure BIO-2a will be required.

Within the RMR treatment area and because of the proximity to nonbreeding and potential breeding habitat, under Mitigation Measure BIO-2a, pretreatment surveys and biological monitoring for all treatment activities will be required year-round within upland and dispersal habitat. In addition, within the CPER and RMR treatment areas, mechanical treatments will be prohibited within 30 feet of Class III wetlands; and all mechanized equipment, including track chippers, and herbicide treatments will shut down for 24 hours following any precipitation event of 0.20 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches; and herbicide use during project implementation will comply with the herbicide use restrictions in the stipulated injunction issued by the Federal District Court for the Northern District of California (Mitigation Measure BIO-2a).

Additionally, impacts to riparian and upland habitat for California red-legged frog will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3). Mitigation Measure BIO-4 will further

reduce potential impacts by requiring protection of state and federally protected wetlands, which include aquatic habitat for California red-legged frog (see Impact BIO-4). Furthermore, impacts from herbicide treatments would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. SPR HAZ-5 and HAZ-6.

Cambria Pines Ecological Reserve Habitat Function Determination

Habitat function for California red-legged frogs on CPER would be maintained because logs greater than 24 inches in diameter and three to five snags per acre would be retained, the root systems of all cut native vegetation would remain in place, and native shrubs (e.g., toyon, gooseberry, and snowberry) and other desirable species as determined by CDFW would be retained. These retention standards would maintain cover for California red-legged frogs.

Pursuant to Mitigation Measure BIO-2a, and because this species is listed under ESA, CDFW is required to consult with USFWS about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained for treatments on CPER. The proposed vegetation treatment activities at CPER would be carried out as part of CDFW's established conservation program, which is consistent with the purposes and policies of ESA for federally listed resident wildlife in the State of California. CDFW has entered into a Cooperative Agreement with USFWS pursuant to Section 6(c) of ESA to assist with the implementation of the State of California's conservation program (CDFW and USFWS 2015). Because the proposed vegetation treatments are covered under the existing Section 6 cooperative agreement with the USFWS, the consultation requirement pursuant to Mitigation Measure BIO-2a is fulfilled.

Rancho Marino Reserve Habitat Function Determination

Habitat function for California red-legged frogs on RMR would be maintained because treatment activities and maintenance treatments would not occur within aquatic habitat, and treatments within WLPZs would be limited pursuant to SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75 percent surface cover within the WLPZ). Furthermore, pursuant to SPR BIO-4, at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within riparian corridors on the reserve would be maintained. Within other habitat in the treatment area, existing native herbaceous vegetation will be retained in a mosaic pattern per Mitigation Measure BIO-2a; and a mosaic of native shrubs at a spacing of 75–100 feet between crowns, where the combined crown for each clump is approximately 15–25 feet wide, would be retained (see Section 2.3.2, "Rancho Marino Reserve Treatment Activities"). In addition, one to four logs greater than 12 inches and 15 feet in length and three to five snags per acre would be retained, along with a minimum of five to 10 percent herbaceous understory vegetation per acre in most areas and woodrat nests when feasible (see Section 2.3.2). These retention standards would maintain cover for California red-legged frogs.

Pursuant to Mitigation Measure BIO-2a, and because this species is listed under ESA, US-LTRCD must consult with USFWS about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained after treatments on RMR. For the reasons summarized above, US-LTRCD determined that implementation of treatments would maintain habitat function for California red-legged frog and consulted with USFWS to seek technical input on this determination, as required. On March 27, 2023, US-LTRCD met with Debora Kirkland at USFWS and discussed the measures that would be implemented to avoid mortality, injury, and disturbance to California red-legged frogs and to maintain habitat function in compliance with Mitigation Measure BIO-2a. Minor refinements to the measures that resulted from this consultation included description of qualifications for biological technicians conducting surveys and monitoring and clarifications related to habitat retention features.

Within the CPER and RMR treatment areas, this impact of the proposed project on California red-legged frog is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Other Special-Status Amphibians and Reptiles

Aquatic habitats suitable for Coast Range newt, two-striped gartersnake, and western pond turtle are found within the pond and seasonal creeks in the RMR treatment area. The RMR treatment area also includes upland habitat for these species. The CPER treatment area may provide upland habitat suitable for Coast Range newt and western pond turtle; however, two-striped gartersnake is not likely to occur on CPER, due to the distance of the reserve from Santa Rosa Creek (the nearest aquatic habitat suitable for the species).

Treatment activities, including mechanical treatments, manual treatments, herbicide application, and prescribed burning conducted within habitat suitable for special-status amphibians and reptiles could result in injury or mortality. The potential for treatment activities to result in adverse effects on special-status reptiles and amphibians was examined in the Program EIR.

CPER. Injury or death of Coast Range newt and western pond turtle from mechanical treatment, manual treatment, herbicide application, and prescribed burning could occur on CPER if conducted in suitable habitat for these species during the sensitive season of the year. Coast Range newts may use the upland habitat within CPER during periods of overland dispersal, which typically occur following rains during the wet season (approximately November 15 to April 15), while western pond turtle may use the south facing grassland on CPER for nesting year-round.

RMR. WLPZs of 50 to 100 feet from any Class II stream (other than Strawberry Creek where the WLPZ would be 75 feet) and 75 to 150 feet adjacent to the pond (Class I) would be implemented within the RMR treatment area per SPR HYD-4, which prohibits driving heavy equipment, equipment fueling, placement of burn piles, and fire ignition within these buffers. In addition, treatment activities would be implemented in compliance with state water quality regulations pursuant to SPR HYD-1, which would further protect potential aquatic habitat. However, the species may be present within upland habitat greater than from the WLPZ width of Class II streams and the pond in the RMR treatment area year-round. These WLPZ prohibitions would reduce impacts on Coast Range newt, two-striped gartersnake, and western pond turtle within the RMR treatment area; however, injury or death of Coast Range newt, two-striped gartersnake, and western pond turtle from mechanical treatment, manual treatment, herbicide application, and prescribed burning would not be completely avoided on RMR because the species is known to occur farther than 50 to 150 feet from aquatic habitat.

Per SPR BIO-1, if it is determined that adverse effects on special-status amphibians and reptiles can be clearly avoided by physically avoiding the habitat suitable for the species or the season of sensitivity, then no surveys or mitigation would be required. However, because the RMR treatment area includes habitat suitable for Coast Range newt, two-striped gartersnake, and western pond turtle that may be occupied year-round, adverse effects cannot clearly be avoided, and SPR BIO-10 would apply. The CPER treatment area includes habitat suitable for western pond turtle, which cannot be avoided due to the potential for nesting to occur year-round, and therefore, SPR BIO-10 would apply. If treatment activities do not occur within habitat suitable for Coast Range newt within the CPER treatment area during the season of sensitivity, then no surveys or mitigation would be required. However, if treatment occurs during the season of sensitivity for Coast Range newt in CPER, adverse effects cannot clearly be avoided, and SPR BIO-10 would apply.

Pursuant to SPR BIO-10, focused surveys for Coast Range newt, two-striped gartersnake, western pond turtle, and western pond turtle nests would be conducted within habitat suitable for these species prior to implementation of treatment activities, if applicable. If no Coast Range newt, two-striped gartersnake, western pond turtle, and western pond turtle nests are observed during focused surveys, then additional mitigation would not be required. If Coast Range newt, two-striped gartersnake, western pond turtle, or western pond turtle nests are observed during focused surveys, then Mitigation Measure BIO-2b will be implemented. Under Mitigation Measure BIO-2b, biological monitoring by a qualified biologist, RPF, or trained contractor during treatment activities will be implemented to avoid injury to or mortality of individual special-status amphibians and reptiles. If the qualified biologist, RPF, or trained contractor detects a special-status amphibian or reptile during treatments, treatment activities will cease until the individual has left the area or has been moved out of harm's way by the qualified biologist, RPF, or trained contractor with the appropriate permits to other nearby habitat suitable for the species. If a western pond turtle nest is detected within treatment areas during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of 50 feet including a path from the nest to the nearest aquatic habitat would be established around the nest.

Additionally, impacts to riparian and upland forested habitat for Coast Range newt, two-striped gartersnake, and western pond turtle would be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3). Mitigation Measure BIO-4 will further reduce potential impacts by requiring protection of state and federally protected wetlands, which could be aquatic habitat suitable for these species (see Impact BIO-4). Furthermore, potential adverse effects from herbicide treatments would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. SPR HAZ-5 and HAZ-6.

CPER. Habitat function for Coast Range newt and western pond turtle on CPER would be maintained because logs greater than 24 inches in diameter and three to five snags per acre would be retained, the root systems of all cut native vegetation would remain in place, and native shrubs (e.g., toyon, gooseberry, and snowberry) and other desirable species as determined by CDFW would be retained to the extent feasible.

RMR. Habitat function for Coast Range newt, two-striped gartersnake, and western pond turtle on RMR would be maintained because treatment activities and maintenance treatments would not occur within aquatic habitat, and treatments within WLPZs would be limited pursuant to SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75 percent surface cover). Furthermore, pursuant to SPR BIO-4, at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within riparian corridors on the reserve would be maintained. Within other habitat in the treatment area, existing native herbaceous vegetation will be retained in a mosaic pattern per Mitigation Measure BIO-2a; and a mosaic of native shrubs at a spacing of 75–100 feet between crowns, where the combined crown for each clump is approximately 15–25 feet wide would be retained (see Section 2.3.2). In addition, one to four logs greater than 12 inches in diameter and 15 feet in length and three to five snags per acre would be retained, along with a minimum of five to 10 percent herbaceous understory vegetation per acre in most areas and woodrat nests when feasible (see Section 2.3.2).

Within the CPER and RMR treatment areas, this impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Special-Status Birds

Two species of special-status birds may occur within treatment areas. Bald eagles and grasshopper sparrow may occur on RMR, and grasshopper sparrow may occur on CPER. Bald eagles usually nest within 1 mile of fish bearing waters, and the RMR treatment area is directly adjacent to the Pacific Ocean, which provides foraging habitat, and larger trees on the reserve may provide suitable nesting habitat. While bald eagles and nests are conspicuous, and there are no documented occurrences of bald eagles nesting on RMR, the presence of bald eagle nests on the reserve in the future cannot be ruled out. The location of CPER inland, over 1 mile from fish bearing waters suitable for foraging, and east of the town of Cambria from the ocean makes bald eagle nesting on the reserve unlikely. The grassland habitat on both CPER and RMR provide habitat potentially suitable for grasshopper sparrow, which has been documented to occur just inland of the treatment areas near North Green Valley Road (CNDDB 2022a).

Treatment activities, including mechanical treatments, manual treatments, herbicide application, and prescribed burning conducted within habitat suitable for special-status birds during the nesting season (February 1 to August 31) could disturb active special-status bird nests from auditory and visual stimuli (e.g., heavy equipment, chain saws, vehicles, personnel) or smoke (e.g., prescribed burning), potentially resulting in abandonment of the roost and loss of young. The potential for treatment activities, including maintenance treatments, to result in adverse effects on special-status birds was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on special-status species can be clearly avoided by physically avoiding the suitable habitat or by conducting treatments outside of the season when a sensitive resource is present, then no additional action would be required. However, if treatments occur during the nesting season for special-status birds (February 1 to August 31), SPR BIO-10 would apply, and focused surveys for bald eagle and grasshopper sparrow nests within the RMR treatment area, and for grasshopper sparrow within the CPER treatment area, would be conducted by a qualified biologist within 14 days prior to implementation of all treatments that are conducted during the nesting season to determine whether special-status birds are present.

If no bald eagle nests are observed during focused surveys in the RMR treatment area, then additional mitigation would not be required. If bald eagle nests are observed during focused surveys pursuant to SPR BIO-10, then Mitigation Measure BIO-2a will be implemented. Under Mitigation Measure BIO-2a nest trees with visible nests will be retained, regardless if nests are occupied, and a no-disturbance buffer of 0.5 mile will be placed around active bald eagle nests. No treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF.

If no grasshopper sparrow nests are observed during focused surveys in the CPER and RMR treatment areas, then additional mitigation would not be required. If grasshopper sparrow nests are observed during focused surveys

pursuant to SPR BIO-10, then Mitigation Measure BIO-2b will be implemented. Under Mitigation Measure BIO-2b, a no-disturbance buffer of at least 300 feet will be implemented around grasshopper sparrow nests, and no treatment activities will occur within the buffer until the chicks have fledged as determined by a qualified biologist or RPF.

Herbicide treatments have the potential for additional adverse effects beyond nest disturbance due to accidental exposure to herbicides or contamination of water sources. However, these effects would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. SPR HAZ-5 and HAZ-6.

The proposed treatments would not result in long-term adverse effects on bald eagle habitat. Due to retention of most native live trees greater than 8 inches dbh, treatments would not substantially alter the live tree canopy. While large snags and dying/diseased/hazard trees that provide nesting habitat may be removed, three to five snags greater than 8 inches dbh per acre would be retained (see Section 2.3.2), maintaining the presence of large snags within the RMR treatment area. The proposed treatments would not result in long-term adverse effects on grasshopper sparrow habitat on RMR because vegetation removal would be focused on forested habitats rather than the grassland utilized by this species. On CPER, habitat for grasshopper sparrow is anticipated to be improved by removing encroaching pines and coyote brush from the coastal prairie within the treatment area. Additionally, impacts to riparian and upland forested habitat for special-status birds will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3).

Rancho Marino Reserve Habitat Function Determination

Pursuant to Mitigation Measure BIO-2a, and because bald eagle is listed as endangered under CESA and potentially suitable nesting habitat is present, US-LTRCD must consult with CDFW about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained. For the reasons summarized in the above discussion, US-LTRCD determined that habitat function for bald eagle would be maintained after implementation of treatments and contacted CDFW to seek technical input on this determination, as required. On March 10, 2023, US-LTRCD sent a memo to Craig Bailey and Margarita Gordus from CDFW describing the measures that will be taken to avoid injury, mortality, or disturbance and maintain habitat function in compliance with Mitigation Measure BIO-2a. On April 5, 2023, US-LTRCD discussed the measures with Margarita Gordus via phone call. Based on this consultation with CDFW, no project specific refinements of Mitigation Measure BIO-2a were added to avoid injury or mortality and maintain habitat function.

Within the CPER and RMR treatment areas, this impact of the proposed project on special-status birds is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Crotch Bumble Bee

Both CPER and RMR contain potentially suitable habitats for this species (e.g., grassland and adjacent forest habitats with floral resources), and the project area is at the edge of the current range of the species (CDFW 2019). Bumble bees have three basic habitat requirements: suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens. The project area contains habitat suitable for bumble bee nesting and overwintering as well as floral resources. Although no recent detections have been documented in the project vicinity (CNDDB 2022a), bumble bees are difficult to identify to species, and therefore, occurrences of Crotch bumble bee may be underreported. The species may use abandoned rodent burrows and similar features within suitable habitat to establish nest colonies. Solitary queens may overwinter under leaf litter or in small cavities a few centimeters into loose soil. The flight season for Crotch bumble bee queens is from late February to late October, peaking in early April through July. The flight season for workers and males is from late March through September when the colony is active. Crotch bumble bees are generalist foragers that feed from open flowers with short corollas (CDFW 2019). Treatment activities within suitable habitat for Crotch bumble bee may result in injury or mortality of Crotch bumble bees and the removal of floral resources. The potential for treatment activities, including maintenance treatments, to result in adverse effects on Crotch bumble bee was examined in the Program EIR, which concluded that impacts on special-status bumble bees would be potentially significant and unavoidable, because it addressed the entirety of the

treatable landscape across the state, so significant impacts could not be ruled out. Addressing this potential effect at a project-specific level may result in a different significance conclusion, if evidence supports it.

In the Program EIR, Mitigation Measure BIO-2g was proposed as a feasible set of actions to reduce potentially significant impacts on special-status bumble bees by requiring avoidance of prescribed burning and targeted ground application of herbicide treatment during the flight/nesting season and retention of suitable habitat in the range of these species, or compensation for unavoidable loss of special-status bumble bees or habitat function. Recognizing the difficulty in detecting overwintering and nesting bumble bees and determining the occurrence and severity of impacts, very limited information about nesting and overwintering behaviors, and the statewide scope of potential effects analyzed, for purposes of good faith and full disclosure under CEQA, this impact was designated in the Program EIR as potentially significant and unavoidable. However, addressing this potential effect at a project-specific level may result in a different significance conclusion if evidence supports it.

Per SPR BIO-1, if it is determined that adverse effects on special-status species can be clearly avoided by physically avoiding the suitable habitat or by conducting treatments outside of the season when a sensitive resource is present, then no additional action would be required. However, because Crotch bumble bees may be present within the treatment areas year-round, either in colonies or overwintering queens, SPR BIO-10 would apply, and focused surveys for Crotch bumble bee would be conducted within suitable habitat for the species prior to implementation of treatment activities, or presence of the species within treatment areas would be assumed.

If no Crotch bumble bees are found during pretreatment surveys, no further measures would be required. If Crotch bumble bees are found, or presence within suitable habitat is assumed, Mitigation Measure BIO-2g will apply, and treatment within suitable habitat will be designed to maintain floral resources during any year of treatment. Additionally, Mitigation Measure BIO-2g includes limiting herbicide use and prescribed burning during the flight season where project objectives will still be met and conducting treatments in a patchy pattern to retain floral resources and refuge for bumble bees. Additionally, impacts to habitat for Crotch bumble bee will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3).

Information on bumble bees in general, and Crotch bumble bee specifically, is gradually becoming more available. However, there is limited information on the abundance of Crotch bumble bee in California or on colony size of the species (CDFW 2019) and a current lack of published information on the potential magnitude of effects from the loss of individual Crotch bumble bee, including overwintering queens or nests, on populations of the species. Therefore, assessing the impact on the species due to the potential loss of individuals and populations (including overwintering queens and nesting bees) from this project would be too speculative to evaluate for the reasons listed above, and as such, further analysis of this issue is not included in accordance with CEQA Guidelines Section 15064(d)(3). CEQA Guidelines indicate that after thorough investigation, if an impact is too speculative for meaningful evaluation, this finding should be noted, and further discussion can be concluded (CEQA Guidelines Section 15145).

Cambria Pines Ecological Reserve Habitat Function Determination

Pursuant to Mitigation Measure BIO-2g, and because this species is a candidate for listing under CESA and is likely to be present year-around in the treatment area, such that habitat cannot be avoided, internal coordination within CDFW on the species was conducted. This coordination concluded that for CESA compliance purposes the mitigation actions for the species are appropriate measures to maintain suitable refuge and habitat functions of floral resources for Crotch bumble bee and no additional recommendations to avoid impacts to the species were provided. For these reasons, it is unlikely that populations of these species would be reduced below self-sustaining levels as a result of implementation of the proposed project or that treatment activities would substantially reduce the number or restrict the range of this species.

Rancho Marino Reserve Habitat Function Determination

Pursuant to Mitigation Measure BIO-2g, and because this species is a candidate for listing under CESA and is likely to be present year-around in the treatment area, such that habitat cannot be avoided US-LTRCD must consult with CDFW about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained. For the reasons summarized in the above discussion, US-LTRCD determined that habitat function for Crotch bumble bee would be maintained after implementation of treatments and contacted CDFW to seek technical input on this determination, as required.

On March 10, 2023, US-LTRCD sent a memo to Craig Bailey and Margarita Gordus from CDFW describing the measures that will be taken to avoid injury, mortality, or disturbance and maintain habitat function in compliance with Mitigation Measure BIO-2a. On April 5, 2023, US-LTRCD discussed the measures with Margarita Gordus via phone call. This coordination concluded that for CESA compliance purposes the mitigation actions for the species are appropriate measures to maintain suitable refuge and habitat functions of floral resources for Crotch bumble bee and no additional recommendations to avoid impacts to the species were provided. For these reasons, it is unlikely that populations of the species would be reduced below self-sustaining levels as a result of implementation of the proposed project or that treatment activities would substantially reduce the number or restrict the range of this species.

Coordination with CDFW on the implementation of SPRs and Mitigation Measure BIO-2g within the CPER and RMR treatment areas concluded that for CESA compliance purposes, the mitigation actions for the species are appropriate measures to maintain suitable refuge and habitat functions of floral resources for Crotch bumble bee, and no additional recommendations to avoid impacts to the species were provided. For these reasons, it is unlikely that populations of these species would be reduced below self-sustaining levels as a result of implementation of the proposed project or that treatment activities would substantially reduce the number or restrict the range of this species.

With implementation of SPRs and Mitigation Measure BIO-2g, the impact of the project on habitat function for Crotch bumble bee would be less than significant and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Monarch Butterfly

Monarch butterflies overwinter along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Habitat suitable for winter roosting monarch butterfly occurs within both the CPER and RMR treatment areas in dense Monterey pine stands adjacent to grasslands, and multiple overwintering sites have been documented in and around Cambria (CNDDB 2022a). Monarch butterflies require milkweed (*Asclepias* spp.) as a host plant for reproduction; however, historically milkweed is largely absent from the Central California coast (The Xerces Society 2017). Therefore, it is unlikely that monarch butterflies breed in the vicinity of the project.

Prescribed burning, mechanical treatments, and manual treatments would occur in habitat potentially suitable for monarch butterfly and could result in the disturbance of overwintering monarch butterfly roosting stands, which could result in impacts on individual butterflies. Herbicide treatments would be conducted by hand using small numbers of personnel and are therefore, not likely to result in disturbance of overwintering monarch butterflies. Herbicide treatments have the potential for adverse effects on monarch butterflies due to accidental exposure to herbicides or contamination of water sources. However, these effects would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. SPR HAZ-5 and HAZ-6. The potential for treatment activities to result in adverse effects on special-status butterflies was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on Monarch butterflies can be clearly avoided by conducting treatments outside of the season of sensitivity or physically avoiding habitat for these species, then mitigation would not be required. Overwintering monarch butterflies can be avoided by avoiding treatment of tree stands during the overwintering period (September through March) (The Xerces Society 2017). If treatments within monarch overwintering habitat cannot avoid the sensitive season for that species, SPR BIO-10 would apply, and focused surveys for the species would be required. If no overwintering monarch butterflies are observed during focused surveys, then no additional avoidance measures for this species would be required. If overwintering monarch butterflies are detected, then Mitigation Measure BIO-2b will be implemented. Under Mitigation Measure BIO-2b potential monarch overwintering stands will be evaluated and treatment activities will be avoided within occupied stands and a buffer as determined by a qualified biologist or RPF.

Habitat function for overwintering monarch butterfly would be maintained because live trees greater than 8 inches dbh would be retained, and Mitigation Measure BIO-2b will be implemented, which requires a treatment plan that maintains the suitability of monarch butterfly overwintering stands. While larger dead, dying, and diseased/hazard trees may be removed, these trees do not contribute to overwintering monarch habitat, due to the lack of foliage on

these trees. Additionally, impacts to overwintering stands will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3).

Within the CPER and RMR treatment areas, this impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Monterey Dusky-Footed Woodrat

The treatment areas on both CPER and RMR provide suitable habitat for Monterey dusky-footed woodrat. This species builds middens of grass, leaves, sticks, and similar materials on the ground, within shrubs, and occasionally in hollows and low branches of large trees. These middens provide shelter year-round for Monterey dusky-footed woodrat in addition to providing a location for breeding and rearing of young. Treatment activities, including mechanical treatments, manual treatments using power equipment, and prescribed burning conducted within habitat suitable for Monterey dusky-footed woodrats could result in the disturbance or destruction of woodrat middens and potential injury or mortality of individuals if present. The potential for treatment activities, including maintenance treatments, to result in adverse effects on Monterey dusky-footed woodrat was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on special-status species can be clearly avoided by physically avoiding the suitable habitat or by conducting treatments outside of the season when a sensitive resource is present, then no additional action would be required. However, because Monterey dusky-footed woodrats may be present within the treatment areas year-round, SPR BIO-10 would apply, and focused surveys for Monterey dusk-footed woodrat middens would be conducted within suitable habitat for the species prior to implementation of mechanical treatments, manual treatments using power equipment, and prescribed burning. Herbicide treatments have the potential adverse effects on woodrats due to accidental exposure to herbicides or contamination of water sources. However, these effects would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5.

If no woodrat middens are found during pretreatment surveys, no further measures are required. If woodrat middens are found, Mitigation Measure BIO-2b will apply, and a no-disturbance buffer of between 5 feet and 10 feet around nests will be implemented if feasible; if it is infeasible to avoid the nest, relocation will be implemented to avoid and minimize disturbance, injury, or mortality.

The proposed treatments are not expected to result in long-term adverse effects on habitat for Monterey dusky-footed woodrat because treatments would not alter the live tree canopy or remove large snags and logs that provide locations and building materials for middens. Habitat function for Monterey dusky-footed woodrats would be maintained because native live trees greater than 8 inches dbh would not be removed, three to five snags per acre would be retained, and some native shrubs would be retained within the treatment areas (see Section 2.3. "Treatment Activities"). Additionally, impacts to habitat for Monterey dusky-footed woodrat will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3).

Within the CPER and RMR treatment areas, this impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Mountain Lion

Suitable foraging habitat for Mountain lions occurs within both CPER and RMR. However, due to the project areas' close proximities to residential development and related human activity, the treatment areas are not likely to be used as denning or nursery habitat. Per SPR BIO-1, if it is determined that adverse effects on mountain lion can be clearly avoided by conducting treatments outside of the season of sensitivity, then further measures would not be required. However, mountain lions may use the treatment areas on CPER and RMR as foraging habitat year-round and therefore impacts cannot be clearly avoided, and SPR BIO-10 would apply. Pursuant to SPR BIO-10, CDFW and US-LTRCD would assume presence of foraging mountain lion within treatment areas.

Treatment activities would be conducted within suitable foraging habitat for mountain lions, and foraging mountain lions may use the treatment area during project implementation. However, work would not occur from dusk to dawn when mountain lions are most active. In addition, foraging mountain lions are also likely to avoid the area while treatments are actively being performed due to increased noise from equipment and human presence. Furthermore,

SPR BIO-2 would be implemented and require biological resources training for workers and would instruct workers to stop work and allow wildlife, including mountain lion, to leave the area unharmed. Herbicide application has the potential for adverse effects due to accidental exposure to herbicides or contamination of water sources, which would be avoided and minimized by implementation of SPR HAZ-5, HAZ-6, and HYD-5. The potential for treatment activities, including maintenance treatments, to result in adverse effects on burrowing or denning special-status wildlife, which includes mountain lion, was examined in the Program EIR.

Habitat function for hunting mountain lions would be maintained by the project because treatment activities would retain native live trees greater than 8 inches dbh, logs greater than 24 inches in diameter, and a portion of the native shrubs, which would provide cover for hunting and habitat and forage for prey species. Additionally, impacts to habitat for mountain lion will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3).

Cambria Pines Ecological Reserve Habitat Function Determination

Pursuant to SPR BIO-10, CDFW would assume presence of mountain lion, and Mitigation Measure BIO-2a will be required. Pursuant to Mitigation Measure BIO-2a, and because this species is a candidate for listing under CESA and is likely to be present year-around in the treatment area while foraging, CDFW discussed internally its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained. For the reasons summarized in the above discussion, CDFW determined that habitat function for mountain lion would be maintained after implementation of treatments.

Rancho Marino Reserve Habitat Function Determination

Pursuant to SPR BIO-10, US-LTRCD would assume presence of mountain lion, and Mitigation Measure BIO-2a will be required. Pursuant to Mitigation Measure BIO-2a, and because this species is a candidate for listing under CESA and is likely to be present year-around in the treatment area while foraging, US-LTRCD must consult with CDFW about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained. For the reasons summarized in the above discussion, US-LTRCD determined that habitat function for mountain lion would be maintained after implementation of treatments and contacted CDFW to seek technical input on this determination, as required. On March 10, 2023, US-LTRCD sent a memo to Craig Bailey and Margarita Gordus from CDFW describing the measures that will be taken to avoid injury, mortality, or disturbance and maintain habitat function in compliance with Mitigation Measure BIO-2a. On April 5, 2023, US-LTRCD discussed the measures with Margarita Gordus via phone call. Based on this consultation with CDFW, additional project specific refinements of Mitigation Measure BIO-2a will not be needed to avoid injury or mortality and maintain habitat function.

Within the CPER and RMR treatment areas, this impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Ringtail

Ringtail is primarily nocturnal and typically occurs in riparian areas, forests (including stands of various ages), rocky areas, and areas of dense shrubs. Potential denning habitat within treatment areas on CPER and RMR includes large logs, snags, large live trees with cavities, and shrub thickets. While live trees larger than 8 inches dbh would not be targeted for removal, the removal of larger snags, dying/diseased/hazard trees, and downed logs, as well as prescribed burning on both reserves may result in disturbance of ringtail dens. The mastication of areas of dense shrubs on RMR may also result in den disturbance. The potential for treatment activities, including maintenance treatments, to result in adverse effects on ringtail was examined in the Program EIR.

Per SPR BIO-1, if it is determined that adverse effects on ringtail can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., maternity season; April 15 through June 30), then mitigation would not be required. Outside of the breeding season, resting ringtails would likely flee due to the presence of equipment, vehicles, or personnel, and injury or mortality would not be expected.

CPER. Within the CPER treatment area, herbicide application, would be limited to ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems and would be conducted by crews of one to five people; thus, these treatments would not be expected to result in disturbance to ringtail dens. Furthermore, the

likelihood of a den in a dense shrubs or logs being inadvertently crushed or otherwise destroyed by herbicide application would be very low. In addition, adverse effects on ringtail would be clearly avoided for mechanical treatments, manual treatments, and prescribed burning that would occur outside of the ringtail maternity season (April 15 through June 30). However, mechanical treatment, manual treatment, or prescribed burning during the ringtail maternity season could result in adverse effects (e.g., dense shrubs and snags up to 24 inches dbh and dying/diseased/hazard trees may be removed on CPER and these features may contain ringtail dens).

RMR. Impacts would be clearly avoided for herbicide application on RMR implemented at any time of the year. Herbicide treatments would be limited to ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems and would be conducted by small crews; thus, these treatments would not be expected to result in disturbance to ringtail dens. Furthermore, the likelihood of a den in a dense shrubs or logs being inadvertently crushed or otherwise destroyed by herbicide application would be very low. In addition, adverse effects on ringtail would be clearly avoided for mechanical treatments, manual treatments, and prescribed burning that would occur outside of the ringtail maternity season (April 15 through June 30). However, mechanical treatment, manual treatment, or prescribed burning during the ringtail maternity season could result in adverse effects.

If conducting prescribed burning, mechanical treatments, or manual treatments outside of the ringtail maternity season is not feasible, then SPR BIO-10 would apply, and presence of ringtail would be assumed or focused surveys for ringtail would be conducted within the treatment areas prior to implementation of treatment activities. Surveys for ringtail would include the use of trail cameras, track plates, and other noninvasive survey methods to determine whether ringtails are present within the treatment area and would be conducted by a qualified RPF or biologist with a valid CDFW Scientific Collecting Permit. If ringtails are not detected during focused surveys, then further mitigation for the species would not be required. If ringtails are detected during focused surveys or assumed to be present, then Mitigation Measure BIO-2a will be implemented and additional surveys will be required to determine whether an active ringtail den is present within the treatment area. If an active den is identified by a qualified RPF or biologist, a no-disturbance buffer will be established around the den, the size of which would be determined through consultation with CDFW. No treatment activities will occur within this buffer until at least the end of the ringtail maternity season.

Habitat function for ringtail would be maintained because treatment activities would not result in removal of live trees greater than 8 inches dbh (unless they are dying/diseased/hazard), which are the most likely trees to provide den locations for ringtail. Although snags and dying/diseased/hazard trees large enough to provide denning habitat would be removed on both reserves, at least three to five snags per acre would be retained (with a preference for the largest snags that exhibit the form and decay characteristics favored by wildlife). Additionally, impacts to habitat for ringtail will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3). Furthermore, at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the treatment area on RMR would be retained (pursuant to SPR HYD-4), which would continue to provide riparian habitat suitable for the species.

Cambria Pines Ecological Reserve Habitat Function Determination

Pursuant to Mitigation Measure BIO-2a, CDFW discussed internally its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function for ringtail would be maintained after implementation of treatments.

Rancho Marino Reserve Habitat Function Determination

Pursuant to Mitigation Measure BIO-2a, US-LTRCD must consult with CDFW about its proposed measures to avoid mortality, injury, or disturbance of the species and its determination that habitat function would be maintained. For the reasons summarized in the above discussion, US-LTRCD determined that habitat function for ringtail would be maintained after implementation of treatments and contacted CDFW to seek technical input on this determination, as required. On March 10, 2023, US-LTRCD sent a memo to Craig Bailey and Margarita Gordus from CDFW describing the measures that will be taken to avoid injury, mortality, or disturbance and maintain habitat function in compliance with Mitigation Measure BIO-2a. On April 5, 2023, US-LTRCD discussed the measures with Margarita Gordus via phone call. Based on this consultation with CDFW, no additional project specific refinements of Mitigation Measure BIO-2a were requested to avoid injury or mortality and maintain habitat function.

Within the CPER and RMR treatment areas, this impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Special-Status Bats

Habitat potentially suitable for two special-status bat species, pallid bat and Townsend's big-eared bat, is present within forest habitat (e.g., within large snags and live trees with cavities) in the treatment areas on CPER and RMR. Per SPR BIO-1, if it is determined that adverse effects on special-status bats can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., maternity season), then mitigation would not be required. Adverse effects on special-status bat maternity roosts would be clearly avoided by conducting initial and maintenance treatments outside of the bat maternity season (April 1–August 31; California Department of Transportation 2004).

Treatment activities, including mechanical treatments, manual treatments, and prescribed burning conducted within habitat suitable for bats during the bat maternity season (April 1 to August 31) could disturb active bat roosts from auditory and visual stimuli (e.g., heavy equipment, chain saws, vehicles, personnel) or smoke (e.g., prescribed burning) potentially resulting in abandonment of the roost and loss of young. Herbicide treatments would be limited to ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems, and would be conducted by small crews; thus, these treatments would not be expected to result in substantial disturbance to special-status bat roosts. The potential for treatment activities to result in adverse effects on special-status bats was examined in the Program EIR.

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

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

Habitat function for special-status bats would be maintained because treatment activities and maintenance treatments would not result in removal of living trees (i.e., conifers, hardwoods) greater than 8 inches dbh other than dying/diseased/hazard trees. Large trees (i.e., greater than 8 inches) would be the most likely feature to be used by this species due to the cover provided, and three to five snags would be retained per acre to provide wildlife habitat. Additionally, impacts to habitat suitable for special-status bats will be avoided or minimized through implementation of Mitigation Measure BIO-3a (see Impact BIO-3).

Within the CPER and RMR treatment areas, this impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

Conclusion

The potential for treatment activities to result in adverse effects on special-status wildlife was examined in the Program EIR. This proposed project's impact on special-status wildlife is within the scope of the Program EIR, because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the Program EIR. Biological resource SPRs that apply to project impacts under Impact BIO-2 are SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4 (RMR only), SPR BIO-8, SPR BIO-10, SPR HAZ-5, SPR HAZ-6, SPR HYD-1, SPR HYD-4, and SPR HYD-5. Mitigation Measures BIO-2a, BIO-2b, BIO-2g, BIO-3a, and BIO-4 also apply to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-3

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on sensitive habitats, including riparian habitat, sensitive natural communities as defined by CDFW (CDFW 2021), and Environmentally Sensitive Habitat Areas (ESHA) as defined by Coastal Act Section 30107.5. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed; however, retreatment at too great a frequency could result in additional adverse effects. The potential for treatment activities, including maintenance treatments, to adversely affect sensitive habitats was examined in the Program EIR.

Based on the habitat types present in the project area, the reconnaissance-level survey of the treatment areas, and vegetation rapid assessments conducted at CPER (Hacker, pers. comm., 2022), one sensitive natural community (i.e., natural communities with a rarity rank of S1, S2, or S3) is present in both treatment areas: Bishop pine - Monterey pine forest and woodland. This sensitive natural community has a rarity rank of S3.2[5] and is classified as ESHA by the Coastal Commission. It is classified as closed-cone pine-cypress habitat by CWHR. One additional sensitive natural community, Santa Lucia fir groves, has a state rarity rank of S3.2 and has the potential to occur in the project vicinity. However, the dominant species in this community, Santa Lucia fir (*Abies bracteata*), is not expected to occur in either treatment area due to a lack of suitable habitat. This species was not observed during the reconnaissance-level survey conducted pursuant to SPR BIO-1 and has not been documented within either treatment area during prior surveys (Butterworth 2022; Wahlert, pers. comm., 2022). This alliance was not found during the vegetation rapid assessments conducted at CPER (Hacker, pers. comm., 2022). In addition, coast oak woodland, which is a sensitive habitat pursuant to the Oak Woodlands Conservation Act and Public Resources Code Section 21083.4, occurs in the CPER treatment area and may occur in the RMR treatment area. Because these sensitive habitats and natural communities are present in the treatment areas, and due to the presence of suitable habitat for multiple special-status species within the treatment area (e.g., see Impact BIO-2 above), the Coastal Commission confirmed that the treatment area can be defined as ESHA, using the definition in Coastal Act Section 30107.5. Therefore, SPR BIO-8 would be implemented for both projects to identify and avoid adverse effects in ESHA, which requires consultation with the Coastal Commission, compliance with the PWP limitations on treatment actions, and monitoring.

During the reconnaissance-level survey conducted pursuant to SPR BIO-1, Monterey pine was observed to be dominant in the closed-cone pine-cypress habitat in both treatment areas. Vegetation rapid assessments conducted at CPER identified Bishop pine - Monterey pine forest and woodland alliance but did not identify any other sensitive natural communities (Hacker, pers. comm., 2022). The coastal prairie habitat in both treatment areas is classified as annual grassland in the FRAP vegetation data, but during the reconnaissance survey, perennial grass species were observed in areas mapped as annual grassland in the FRAP vegetation data, and oatgrass (*Danthonia californica)* association, a perennial grass dominated community with a state rarity rank of S4 (Apparently Secure), was identified at CPER during the vegetation rapid assessments. There is potential for sensitive natural communities typically associated with perennial grassland habitat to occur in the RMR treatment area. Although Bishop pine - Monterey pine forest and woodland sensitive natural community is known to be present within both treatment areas, the extent of this community within each treatment area has not been mapped. As a result, before implementation of treatment activities, SPR BIO-3 would be implemented and a qualified RPF or biologist would map the extent of the Bishop pine - Monterey pine forest and woodland alliance within both treatment areas. Additionally, a qualified RPF or biologist would identify sensitive natural communities in the RMR treatment area to the alliance level pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) and using the Manual of California Vegetation (including updated natural communities data at http://vegetation.cnps.org/).

CPER. Although vegetated swales are present within CPER, there is no riparian habitat associated with these features or elsewhere within the CPER treatment area.

[5] A state rarity rank of S3 indicates a vulnerable sensitive natural community in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state. Older ranks, which need to be updated by CDFW, may still contain a decimal "threat" rank of .1, .2, or .3, where .2 indicates moderate threat.

RMR. Riparian habitat and wetland vegetation was observed during the reconnaissance survey within the RMR treatment area adjacent to Strawberry Creek. CAL FIRE's FRAP vegetation data for the treatment area does not include any mapped riparian habitat; however, riparian communities are often overlooked at the scale of mapping and classification in vegetation data sources that have not been ground verified. The National Wetlands Inventory (NWI) classifies Strawberry Creek on the northern end of RMR and an unnamed drainage on the southern end of RMR as freshwater forested/shrub wetland (USFWS 2022). However, no riparian or wetland vegetation was observed at the western end of the unnamed drainage during the reconnaissance survey and the remainder of the drainage was not accessed during the site reconnaissance. Under SPR HYD-4, a WLPZ of 75 feet adjacent to Strawberry Creek would be implemented for manual and mechanical treatments, prescribed burning, and herbicide application, which would limit the extent of treatment activities within riparian habitat. While these SPRs would reduce potential impacts on riparian habitat, the extent of riparian habitat within the treatment area has not been mapped and riparian habitat may be present outside of the areas encompassed within WLPZs. As a result, before implementation of treatment activities, SPR BIO-3 would be implemented to identify and map the extent of riparian habitat within a treatment area. As required under SPR BIO-4, treatments in riparian habitats would retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation and would be limited to removal of uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants). Only manual treatments are proposed within the riparian habitat, and pursuant to SPR HYD-4, driving heavy equipment, equipment fueling, placement of burn piles, and fire ignition would be prohibited within the WLPZ. In addition, pursuant to SPR BIO-4 and HYD-5, only herbicides labeled for use in aquatic environments would be used when working in riparian habitats and in areas where there is a possibility the herbicide could come into direct contact with water. Hand application of herbicides within riparian habitat would occur only during low-flow periods or when seasonal streams are dry. Pursuant to SPR HYD-5, the use of herbicides, aquatic and terrestrial, would be avoided within WLPZs or ELZs, unless it is determined to be infeasible to avoid application in these areas. The avoidance of herbicide use during initial treatments is feasible, due to the current size and spread of the populations of invasive weeds. However, due to potential invasive weed colonization and spread in the future, the use of mechanical and manual removal during maintenance treatments may not be feasible or meet projects objectives of removing invasive weeds; therefore, the limited application of herbicides, as described in Section 2.3.2, within WPLZs and ELZs may be required on RMR during treatment maintenance. In addition, before conducting any treatments in WPLZs on RMR the project proponent would consult with CDFW to determine if notification pursuant to California Fish and Game Code 1602 is required. For treatments occurring within riparian habitat, the project proponent would implement SPR BIO-3 and notify CDFW pursuant to California Fish and Game Code 1602, when required and would implement SPR BIO-8 in compliance with the PWP.

Treatment activities are proposed within the identified sensitive natural community Bishop pine - Monterey pine forest and woodland and coast oak woodlands. See Section 4.5, Impact BIO-1 for a detailed discussion on Monterey pine. However, because avoiding treatment activities in these communities would preclude achieving treatment objectives, Mitigation Measure BIO-3a will apply in these areas to ensure that the characteristics that qualify the communities as sensitive (e.g., dominant canopy species, relative percentage of dominant species, species composition) are retained post-treatment to the extent feasible. Under Mitigation Measure BIO-3a, a qualified RPF or biologist will determine the natural fire regime, condition class, and fire return interval for each sensitive natural community and oak woodland type. Initial and maintenance treatment activities in sensitive natural communities and oak woodlands will be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function.

Conclusion

The potential for treatment activities to result in adverse effects on sensitive habitats, as described above, was examined in the Program EIR. This impact on sensitive habitats is within the scope of the Program EIR, because the treatment activities and intensity of disturbance as a result of implementing treatment activities would be consistent with those analyzed in the Program EIR. Biological resource SPRs that apply to project impacts under Impact BIO-3 are SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4 (RMR only), SPR BIO-6, SPR BIO-8, SPR BIO-9, SPR HYD-4, and SPR HYD-5. The biological resource mitigation measure that applies to project impacts under Impact BIO-3 is Mitigation

Measure BIO-3a. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-4

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

During the reconnaissance-level surveys conducted pursuant to SPR BIO-1, two wetland swales were observed within the Monterey pine forest and woodland habitat generally bisecting the CPER treatment area from east to west, and an ephemeral drainage, likely a Class III stream, was observed within the montane hardwood-conifer habitat at the southern part of the CPER treatment area. Strawberry Creek, a Class II stream, occurs within the RMR shaded fuel break treatment area. Additional aquatic features observed within the RMR treatment area consist of a freshwater emergent wetland located at the west end of Strawberry Creek, several ephemeral drainages (likely Class III streams), most of which appear to drain into the Pacific Ocean, and a freshwater pond (a Class I water) located southeast of Camp Ocean Pines. The pond supports sporadic marsh vegetation along its edge. NWI does not identify any aquatic features within the CPER treatment area. NWI classifies the RMR treatment area as having 0.005 acres freshwater emergent wetland, 1.844 acres of freshwater forested/shrub wetland, 1.454 acres freshwater pond, and 0.018 acres of riverine habitat (USFWS 2022). FRAP vegetation data and National Wetland Inventory data are sourced using different methods, which accounts for differences in acreages and types. Acreage totals and types for both sources are provided here to provide a full picture of aquatic habitat potentially present in the RMR treatment area; however, resources mapped in these databases are identified primarily through aerial imagery and are not ground verified. An aquatic resources delineation would be required to accurately identify the type and extent of state and federally protected wetlands and waters in the treatment areas.

Pursuant to SPR HYD-4, a WLPZ of 50 to 100 feet adjacent to Class II streams, other than Strawberry Creek where the WLPZ would be 75 feet, and 75 to 150 feet adjacent to the pond (a Class I water) within the RMR treatment area would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV streams within both the RMR and CPER treatment areas for manual, mechanical, herbicide, and pile burning treatments. Establishment of WLPZs would result in avoidance of all stream and pond habitat for manual, mechanical, prescribed burning, and herbicide application treatments.

Two swales are present in the CPER treatment area and additional wetlands may be present throughout the project area that have not been identified or mapped, as well as ponds smaller than one acre (i.e., not considered a lake under Forest Practice Rules), seasonal wetlands, springs, and seeps. Mitigation Measure BIO-4 will apply to all treatment activities, and a qualified RPF or biologist will delineate the boundaries of these features; establish an appropriate buffer (with a minimum of 25 feet) around seasonal wetlands, including swales, springs, and seeps; and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). A larger buffer may be required if wetlands or other aquatic habitats contain habitat potentially suitable for special-status plants or special-status wildlife (e.g., western pond turtle, California red-legged frog; see Impact BIO-2). Containment lines for prescribed burns will be installed or created outside of Strawberry Creek, the unnamed drainage, the swales at CPER, and any other wetlands, springs, seeps, streams, or other aquatic features identified during Mitigation Measure BIO-4 surveys.

Conclusion

The potential for treatment activities to adversely affect state or federally protected wetlands was examined in the Program EIR. This impact on wetlands is within the scope of the Program EIR, because the treatment activities and intensity of disturbance as a result of implementing treatment activities would be consistent with those analyzed in the Program EIR. Biological resource SPRs that apply to project impacts under Impact BIO-4 are SPR BIO-1, SPR HYD-1, and SPR HYD-4. The biological resource mitigation measure that applies to project impacts under Impact BIO-4 is

Mitigation Measure BIO-4. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-5

Initial vegetation treatments and maintenance treatments on both CPER and RMR could result in direct or indirect adverse effects on wildlife movement corridors and nurseries because habitat suitable for wildlife is present in both treatment areas. In addition, based on review and survey of project-specific biological resources (SPR BIO-1), CPER is within an identified essential connectivity area for regional wildlife movement (CNDDB 2022b). The RMR treatment area is located at the edge of this same essential connectivity area. Therefore, in addition to local wildlife movement within the treatment areas, the treatment areas also function to facilitate movement of wildlife through the region. The potential for treatment activities to result in adverse effects on wildlife movement corridors and nurseries was examined in the Program EIR.

Due to the nature of the proposed treatment activities (e.g., retaining live trees other than dying/diseased/hazard trees greater than 8 inches dbh, retention of a mosaic of native shrubs) implementation of treatments would not result in a substantial change in the existing conditions that facilitate wildlife movement through the treatment areas. Furthermore, pursuant to SPR HYD-4, a WLPZ of 50 to 100 feet adjacent to Class II streams (other than Strawberry Creek where the WLPZ would be 75 feet) would be implemented within RMR, which would limit the extent of treatment activities within riparian habitat (e.g., no mechanical treatment, no burn piles, retention of at least 75 percent surface cover) that would likely function as a wildlife movement corridor. Pursuant to SPRs BIO-3 and BIO-4 (RMR only), treatments in sensitive natural communities and riparian habitat, respectively, would be designed to maintain habitat function of these communities. Habitat function within the project area would be maintained and there would not be a substantial change in the existing conditions that facilitate wildlife movement or provide nursery habitat in the project area.

If during surveys conducted pursuant to SPR BIO-10 wildlife nursery sites (e.g., deer fawning areas, common bat roosts) are detected, Mitigation Measure BIO-5 will apply to all treatment activities and a no-disturbance buffer would be established around these features, the size of which would be determined by a qualified biologist or RPF.

The potential for treatment activities to interfere substantially with wildlife movement corridors or impede use of wildlife nurseries was examined in the Program EIR, and the potential for adverse effects on wildlife movement and nurseries is within the scope of the Program EIR, because the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the Program EIR. Biological resource SPRs that apply to project impacts under Impact BIO-5 are SPR BIO-1, SPR BIO-3, SPR BIO-4 (RMR only), SPR BIO-10, SPR HYD-1, and SPR HYD-4. The biological resource mitigation measure that applies to project impacts under Impact BIO-5 is Mitigation Measure BIO-5. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-6

Initial vegetation treatments and maintenance treatments on both CPER and RMR could result in direct or indirect adverse effects resulting in reduction abundance of common wildlife, including nesting birds, because habitat suitable for these species is present throughout the treatment areas. Treatment activities, including mechanical treatments, manual treatments, prescribed burning, and herbicide application, conducted during the nesting bird season (February 1–August 31) could result in direct loss of active nests or disturbance to active nests from auditory and visual stimulus (e.g., heavy equipment, chain saws, vehicles, personnel) potentially resulting in abandonment and loss of eggs or chicks. The potential for treatment activities, including maintenance treatments, to result in adverse effects on these resources was examined in the Program EIR.

SPR BIO-12 would apply to treatments on both CPER and RMR; for treatments implemented during the nesting bird season, a survey for common nesting birds would be conducted within the treatment area by a qualified RPF or biologist prior to treatment activities. If no active bird nests are observed during focused surveys, then additional avoidance measures would not be required. If active nests of common birds or raptors are observed during focused surveys, disturbance to the nests would be avoided by establishing an appropriate buffer around the nests, modifying

treatments to avoid disturbance to the nests, or deferring treatment until the nests are no longer active as determined by a qualified RPF, biologist, or biological technician.

The potential for adverse effects on common wildlife, including nesting birds, is within the scope of the Program EIR, because the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the Program EIR. Biological resource SPRs that apply to project impacts under Impact BIO-6 are SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4 (RMR only), and SPR BIO-12. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-7

The proposed project would occur within the Coastal Zone of San Luis Obispo County; as such, the project must comply with the provisions of the Coastal Act and relevant LCP. In collaboration with multiple agencies, US-LTRCD developed, and the Coastal Commission approved, a PWP as a companion to the CalVTP to provide design standards for projects in the Coastal Zone and compliance with the LCP. The project would be implemented in compliance with the PWP and would therefore not result in a conflict with the LCP. The potential for the proposed treatments to conflict with local policies was examined in the Program EIR and is within the scope of the Program EIR because vegetation treatment locations, types, and activities are consistent with those analyzed in the Program EIR. In addition, all projects implemented under the CalVTP would be required to comply with applicable local policies, plans, and ordinances, per SPR AD-3 to the extent the project proponent and project partner are subject to them. Furthermore, projects implemented under the US-LTRCD's PWP are not expected to require additional approvals from San Luis Obispo County (see Attachment A). This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT BIO-8

The potential for the proposed treatments to conflict with the provision of an adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) was examined in the Program EIR. Implementation of the proposed vegetation treatment and maintenance treatments would not result in a conflict with an adopted HCP or NCCP because the project area is not within the plan area of any adopted HCP or NCCP. Therefore, this impact does not apply to the proposed project. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW BIOLOGICAL RESOURCE IMPACTS

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities considered in the CalVTP Program EIR. CDFW and US-LTRCD have 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 Program EIR (refer to Section 3.6.1, "Environmental Setting," and Section 3.6.2, "Regulatory Setting," in Volume II of the Final Program EIR). CDFW and US-LTRCD have also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the Program EIR. No changed circumstances are present that would give rise to any new significant impacts not addressed in the Program EIR. Therefore, no new impact related to biological resources would occur that is not covered in the Program EIR.

4.6 GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

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

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Geology, Soils, Paleontology, and Mineral Resource Impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

The northern coastal area of San Luis Obispo County is underlain primarily by Jurassic- to Cretaceous-age (approximately 120 to 180 million years old) rocks of the Franciscan complex, which is a mixture of igneous, metamorphic, and sedimentary rocks. Along the coastal plain, and within stream valleys, the older bedrock formations are overlain by recent to Quaternary-age alluvium and terrace deposits. Soils in Cambria are primarily San Simeon-Conception, which are moderately deep to very deep, gently sloping to steep, and moderately well drained soils on old marine terraces. These types of soils are primarily deep, well-drained soils that tend not to be expansive. Streams in the region are typically bordered by steep to moderately steep terrain, and the bottoms of stream valleys contain Quaternary- to Recent-age alluvium, which overlies the bedrock. Although no areas with known landslide activity are identified within the project area (USGS 2022), the bedrock exposed on the hillsides is locally subject to landslides of recent origin; some large-scale landslides that exist in the region developed on Franciscan Formation slopes (Cambria CSD 2008).

IMPACT GEO-1

Vegetation treatments would include ecological restoration and fuel breaks through use of prescribed burning, mechanical treatment, manual treatment, and targeted ground application of herbicides. These activities could result in varying levels of soil disturbance and have the potential to increase the rates of erosion and loss of topsoil. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the Program EIR. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial

erosion or loss of topsoil, especially in areas that contain steep slopes, or in areas that previously experienced fire. This impact is within the scope of the Program EIR because the use and type of equipment, extent of vegetation removal, and intensity of prescribed burning and other treatment activities are consistent with those analyzed in the Program EIR.

SPRs applicable to this impact are GEO-1 through GEO-8, AQ-3, AQ-4, and HYD-4, which would be implemented to avoid and minimize the risk of substantial erosion and loss of topsoil as a result of project implementation. As discussed above, this determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT GEO-2

Treatment activities would include prescribed burning, mechanical treatment, manual treatment, and targeted use of herbicides. No areas with known landslide activity are identified within the project area (USGS 2022). The potential for treatment activities to increase landslide risk was examined in the Program EIR. This impact is within the scope of the Program EIR because the extent of vegetation removal, intensity of prescribed burning, and characteristics of the geographical terrain are consistent with those analyzed in the Program EIR.

SPRs applicable to this impact are AQ-3, GEO-3, GEO-4, GEO-7, and GEO-8, which require the stabilization of mechanically disturbed soil, erosion monitoring, and that a registered professional forester or licensed geologist evaluate treatment areas with slopes greater than 50 percent for unstable areas. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCE IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.7.1, "Environmental Setting," and Section 3.7.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to geology, soils, paleontology, or mineral resources would occur.

4.7 GREENHOUSE GAS EMISSIONS

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	Impact GHG-1, pp. 3.8-10 – 3.8-11	Yes	None	NA	LTS	No	Yes
Impact GHG-2: Generate GHG Emissions through Treatment Activities	SU	Impact GHG-2, pp. 3.8-11 – 3.8-17	Yes	AQ-3	GHG-2	SU	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact; None = there are SPRs and/or MMs identified in the Program EIR for this impact, but none are applicable to the treatment project.

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

IMPACT GHG-1

Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments and biomass processing would result in GHG emissions. The potential for the treatments under the CalVTP to conflict with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the Program EIR. Consistent with the Program EIR, although GHG emissions would occur from equipment and vehicles used to implement treatments, the purpose of the proposed project is to reduce wildfire risk and promote a natural landscape more resilient to wildfires, which could reduce GHG emissions and increase carbon sequestration over the long term. This impact is within the scope of the Program EIR because the proposed activities, as well as the associated equipment, duration of use, and resultant GHG emissions, are consistent with those analyzed in the Program EIR. SPR GHG-1 is not applicable to the proposed project because this project is not a registered offset project under the Board's Assembly Bill 1504 Carbon Inventory Process. No SPRs are needed to maintain this impact at less than significant, consistent with the significance determination in the Program EIR. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT GHG-2

Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments and biomass processing would result in GHG emissions. The potential for treatments under the CalVTP to generate GHG

emissions was examined in the Program EIR. This impact was found to be significant and unavoidable after the application of all feasible mitigation measures because of the infeasibility of implementing specific emission reduction techniques and the uncertainties associated with all the parameters and objectives of prescribed burning. Mitigation Measure GHG-2 in the CalVTP Program EIR requires project proponents to implement feasible methods to reduce the GHG emissions from prescribed burning, including pile burning. Accordingly, US-LTRCD and CDFW are proposing the use of air curtain burners and carbonators (i.e., (i.e., biochar kiln). The essential function of these specialized biomass processing technologies is to reduce smoke, and resultant GHG emissions compared to pile burning by consuming biomass quickly and efficiently. According to a 2020 study of biomass, air curtain burners and carbonators emit 54 percent less CO_2 emissions compared to pile burning (Puettmann et al. 2020, as cited in Ascent 2022). In addition, the production of biochar by these technologies and subsequent application as a soil amendment provides long-term carbon sequestration benefits that are not available from pile burning.

This impact is within the scope of the Program EIR because the proposed activities, as well as the associated equipment and duration of use and the intent of the treatments to reduce wildfire risk and GHG emissions related to wildfire are consistent with those analyzed in the Program EIR. Mitigation Measure GHG-2 will be implemented by using air curtain burners and carbonators when feasible to reduce GHG emissions associated with pile burning. Although use of these specialized biomass processing technologies would substantially reduce GHG emissions, emissions generated by the treatment would still contribute to the annual emissions generated by the CalVTP, and this impact would remain significant and unavoidable, consistent with, and for the same reasons described in, the Program EIR. SPR AQ-3 is also applicable to this treatment and would contain the description of feasible GHG reduction techniques implemented per Mitigation Measure GHG-2. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW IMPACTS RELATED TO GHG EMISSIONS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.8.1, "Environmental Setting," and Section 3.8.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to GHG emissions would occur.

4.8 ENERGY RESOURCES

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

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

IMPACT ENG-1

Use of vehicles and mechanical equipment during initial treatment and treatment maintenance activities as well as biomass processing would result in the consumption of energy through the use of fossil fuels. The use of fossil fuels for equipment and vehicles and the potential for treatments under the CalVTP to result in wasteful, inefficient, or unnecessary consumption of energy was examined in the Program EIR. Consistent with the Program EIR, and in consideration of the project's purpose to reduce wildfire occurrence and severity, implementation of the proposed treatment types is reasonably expected to reduce the intensity of response to wildfire, specifically the resources needed for fire suppression (e.g., equipment and vehicles). With less intense wildfire suppression response and its relatively inefficient consumption of energy, fuel and energy consumption for wildfire suppression response would decrease, as well. The consumption of energy during implementation of the treatment project is within the scope of the Program EIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the Program EIR. No SPRs are applicable to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

NEW ENERGY RESOURCE IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.9.1, "Environmental Setting," and Section 3.9.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to energy would occur.

4.9 HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	LTS	Impact HAZ-1, pp. 3.10-14 – 3.10-15	Yes	HAZ-1 HYD-4	NA	LTS	No	Yes
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	LTS	Impact HAZ-2, pp. 3.10-15 – 3.10-18; Appendix HAZ-1 and HAZ-2	Yes	HAZ-5 through HAZ-9	NA	LTS	No	Yes
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	LTSM	Impact HAZ-3, pp. 3.10-18 – 3.10-19	Yes	NA	HAZ-3	LTSM	No	Yes

Notes: LTS = less than significant; LTSM = less than significant with mitigation; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Hazardous Materials, Public Health and Safety Impacts: Would the treatment result in other impacts related to hazardous materials, public health and safety that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

IMPACT HAZ-1

Initial and maintenance treatments would include mechanical treatments, manual treatments, herbicide application, and prescribed burning. These treatment activities would require the use of fuels and related accelerants, which are hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the Program EIR. This impact is within the scope of the Program EIR because the types of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the Program EIR. SPR HAZ-1 and SPR HYD-4 are applicable to this treatment. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT HAZ-2

Initial and maintenance treatments within CPER and RMR would include herbicide application to target plant species using ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems. No aerial spraying of herbicides would occur. The potential for treatment activities to cause a significant health hazard from the use of herbicides was examined in the Program EIR. This impact is within the scope of the Program EIR because the herbicides (e.g., glyphosate) and application methods that would be used, which are limited to ground-based applications, are consistent with those analyzed in the Program EIR. In addition, herbicides would be applied by licensed applicators in compliance with all laws, regulations, and herbicide label instructions, consistent with herbicide use described in the Program EIR. SPRs HAZ-5 through HAZ-9 are applicable to this treatment. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT HAZ-3

Initial and maintenance treatments would include soil disturbance and prescribed burning, which could expose workers, the public, or the environment to hazardous materials if a contaminated site is present within the project area. The potential for workers conducting treatment activities to encounter contamination that could expose them, the public, or the environment to hazardous materials was examined in the Program EIR. This impact was identified as potentially significant in the Program EIR because hazardous materials sites could be present within treatment sites throughout the large geographic extent of the treatable landscape, and the feasibility of implementing mitigation for exposure of people or the environment to hazards resulting from soil disturbance or burning in a hazardous materials site was uncertain.

As required by Mitigation Measure HAZ-3, database searches for hazardous materials sites within the project area have been conducted. A leaking underground storage tank site (Hampton Hotel [T0607900034]) is located within 0.25 mile of CPER; however, the site has been remediated and closed. No hazardous materials sites were identified within 0.25 mile of RMR (DTSC 2022; CalEPA 2022; SWRCB 2022) (Attachment D). No hazardous materials sites were identified within the project area. Therefore, after the implementation of Mitigation Measure HAZ-3, it was determined that no hazardous materials sites would be disturbed by treatments and this impact would be less than significant. No SPRs are applicable to this impact, and no additional mitigation is required. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.10.1, "Environmental Setting," and Section 3.10.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to hazardous materials, public health and safety would occur.

4.10 HYDROLOGY AND WATER QUALITY

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

Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	LTS	Impact HYD-5, p. 3.11-31	Yes	HYD-4 HYD-6 GEO-5	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Hydrology and Water Quality Impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

The project area is within the Central Coast hydrologic region, and within the Santa Rosa Creek watershed. Hydrologic features in the project vicinity include Santa Rosa Creek, Strawberry Creek, and Perry Creek. As described under Impact BIO-4, two wetland swales were observed within the Monterey pine forest and woodland habitat generally bisecting the CPER treatment area from east to west, and an ephemeral drainage, likely a Class III stream, was observed at the southern part of the CPER treatment area. Strawberry Creek, a Class II stream, occurs within the RMR shaded fuel break treatment area. Additional aquatic features observed within the RMR treatment area consist of a freshwater emergent wetland located at the west end of Strawberry Creek, several ephemeral drainages (likely Class III streams), and a freshwater pond located southeast of Camp Ocean Pines. The town of Cambria is near the mouth of Santa Rosa Creek, downstream of the confluence with Perry Creek, which is the largest tributary in the Santa Rosa Creek subwatershed. Slopes within the project area drain into Santa Rosa Creek and its tributaries flow mostly unobstructed on steep hillslopes mantled with shallow soils and sparse shrub vegetation and through Cambria before reaching the Pacific Ocean (California Coastal Conservancy 2010).

Several of the impacts below (i.e., Impact HYD-1 through Impact HYD-4) evaluate compliance with water quality standards or waste discharge requirements. All include implementation of SPR HYD-1, which requires compliance with such water quality regulations. The State Water Resources Control Board requires all projects using the CalVTP Program EIR to follow the requirements of their Vegetation Treatment General Order, which would meet the requirements of SPR HYD-1. Users of the CalVTP PSA process are automatically enrolled in the General Order and are required to implement all applicable SPRs and mitigation measures from the Program EIR. In addition, the General Order requires project proponents to comply with any applicable Basin Plan prohibitions.

IMPACT HYD-1

Initial and maintenance treatments would include prescribed burning. Ash and debris from treatment areas could be washed by runoff into adjacent drainages and streams. Although the project has been designed to avoid most streams and watercourses by omitting them from treatment areas, WLPZs ranging from 50 to 150 feet would be implemented for Class I and Class II streams that are within treatment areas pursuant to SPR HYD-4. Specifically, pursuant to SPR HYD-4, a WLPZ of 50 to 100 feet adjacent to Class II streams, other than Strawberry Creek where the WLPZ would be 75 feet and a WLPZ of 75–150 feet adjacent to the pond (a Class I water) would be implemented within RMR, which would limit the extent of treatment activities within the WLPZ (Figure 2-1). In addition, pursuant to

SPR HYD-4, WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to any Class III and Class IV waters that may occur within the treatment areas. As required under SPR HYD-4, burn piles would be located outside of the WLPZ. In addition, no fire ignition or use of accelerants would occur within the WLPZ; however, low intensity backing fires may be allowed to enter or spread into WLPZs.

The potential for prescribed burning activities to cause runoff and violate water quality regulations or degrade water quality was examined in the Program EIR. This impact is within the scope of the Program EIR because parameters of broadcast burns (i.e., low intensity) and pile burning are consistent with those analyzed in the Program EIR. SPRs applicable to this treatment are HYD-1, HYD-4, BIO-4 (RMR only), GEO-4, GEO-6, and AQ-3. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT HYD-2

Initial and maintenance treatments would include mechanical and manual treatments. Although the project has been designed to avoid most streams and watercourses by omitting them from treatment areas, WLPZs of 50 to 150 feet would be implemented for any watercourse or pond within treatment areas pursuant to SPR HYD-4. As discussed under Impact HYD-1, a WLPZ of 50 to 100 feet adjacent to Class II streams, other than Strawberry Creek where the WLPZ would be 75 feet, would be implemented within RMR (Figure 2-1). Additionally, a WLPZ of 75 to 150 feet adjacent to the pond (a Class I water) within the RMR treatment area would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV streams that occur within treatment areas. Mechanical treatment would not occur within the WLPZ; rather, manual treatment would be utilized in the WLPZ to reduce ground disturbance and potential erosion into waters. Furthermore, treatment activities within the WLPZ would be required per SPR HYD-4 to retain at least 75 surface cover to act as a filter strip for raindrop energy dissipation.

The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the Program EIR. This impact is within the scope of the Program EIR because the use of heavy equipment and hand-held tools to remove vegetation, intensity of proposed mechanical treatment activities, and extent of vegetation removal are consistent with those analyzed in the Program EIR. SPRs applicable to this treatment are HYD-1, HYD-4, HYD-5, GEO-1 through GEO-5, GEO-7, GEO-8, BIO-1, HAZ-1, and HAZ-5. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT HYD-3

This impact does not apply to the proposed project because prescribed herbivory is not a proposed treatment activity.

IMPACT HYD-4

Initial and maintenance treatments would include limited and targeted use of herbicides to manage invasive plant species and resprouting native tree species within both CPER and RMR. Herbicide application would be limited to ground-based methods, such as a using targeted spray from a backpack or painting herbicide onto cut stems. All herbicide application would comply with EPA and DPR label standards. As discussed under Impact HYD-1, a WLPZ of 50 to 100 feet adjacent to Class II streams, other than Strawberry Creek where the WLPZ would be 75 feet, would be implemented within RMR (Figure 2-1). Additionally, a WLPZ of 75 to 150 feet adjacent to the pond (a Class I water) within the RMR treatment area would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV streams that occur within treatment areas. The use of terrestrial or aquatic herbicides would not occur within any WLPZ.

The potential for the use of herbicides to violate water quality regulations or degrade water quality was examined in the Program EIR. This impact is within the scope of the Program EIR because the use and types of herbicides to remove vegetation are consistent with those analyzed in the Program EIR. SPRs applicable to this treatment are

HYD-1, HYD-5, BIO-4 (RMR only), HAZ-5, and HAZ-7. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT HYD-5

Initial and maintenance treatments could cause ground disturbance and erosion, which could directly or indirectly modify existing drainage patterns. The potential for treatment activities to substantially alter the existing drainage pattern of a project area was examined in the Program EIR. The project does not propose the nonshaded fuel break treatment type, which is the most likely type to modify local runoff patterns. This impact to site drainage is within the scope of the Program EIR because the use and type of equipment, extent of vegetation removal, use of manual treatments, and intensity of proposed mechanical treatment activities are consistent with those analyzed in the Program EIR. SPRs applicable to this treatment are HYD-4, HYD-6, and GEO-5. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW HYDROLOGY AND WATER QUALITY IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.11.1, "Environmental Setting," and Section 3.11.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to hydrology and water quality would occur.

4.11 LAND USE AND PLANNING, POPULATION AND HOUSING

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	LTS	Impact LU-1, pp. 3.12-13 – 3.12-14	Yes	AD-3 AD-9	NA	LTS	No	Yes
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15	Yes	NA	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Land Use and Planning, Population and Housing Impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

IMPACT LU-1

Initial and maintenance vegetation treatments and biomass processing would occur within CPER, which is owned and managed by CDFW, and RMR, which is privately owned but managed by the University of California, Santa Barbara. Both reserves are located in the unincorporated town of Cambria in San Luis Obispo County and are within the Coastal Zone, as defined by the California Coastal Act. The potential for vegetation treatments to cause a significant environmental impact due to the conflict with a land use plan, policy, or regulation was evaluated in the Program EIR. This impact is within the scope of the Program EIR because the treatment locations, types, and activities associated with the project are consistent with those analyzed in the Program EIR. SPRs AD-3 and AD-9 are applicable to this impact and would avoid and minimize the risk of significant environmental impact due to conflicts with a land use plan, policy, or regulation. The proposed project has been reviewed for consistency with the San Luis Obispo General Plan. As noted in Section 4.12, "Noise," below, treatment activities would take place during daytime hours, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours consistent with the San Luis Obispo General Plan. US-LTRCD and CDFW would comply with the Coastal Act through the existing US-LTRCD Forest Health and Fire Resilience PWP; the treatment design and this PSA are consistent with the requirements of the PWP (US-LTRCD 2021). This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT LU-2

The potential for initial treatments and maintenance treatments to result in substantial population growth as a result of increases in demand for employees was examined in the Program EIR. At each reserve, the average number of workers on-site for a prescribed burn would be 45, which would be spread across two to four crews. Up to 20 crewmembers would implement mechanical treatments at each reserve. One or two hand crews consisting of 20–40 crew members would be used for a typical manual treatment at each reserve. Herbicide treatments would typically use a one- to five-person crew at each reserve. Crew sizes would be consistent with those analyzed in the Program EIR. Impacts associated with short-term increases in the demand for workers during implementation of the treatment project are within the scope of the Program EIR because the number of workers required for implementation of the treatments is consistent with the crew sizes analyzed in the Program EIR for the types of treatments proposed. In addition, the proposed project would not require the hiring of new employees or the creation of new staff positions at CDFW or US-LTRCD. No SPRs apply to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

NEW LAND USE AND PLANNING, POPULATION AND HOUSING IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.12.1, "Environmental Setting," and Section 3.12.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to land use and planning or population and housing would occur.

4.12 NOISE

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	LTS	Impact NOI-1, pp. 3.13-9 – 3.13-12; Appendix NOI-1	Yes	AD-3 NOI-1 through NOI-6	NA	LTS	No	Yes
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated Single-Event Noise Levels During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	Yes	NOI-1	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

IMPACT NOI-1

Initial and maintenance treatments would require the use of noise-generating equipment during treatment activities and biomass processing. The potential for a substantial short-term increase in ambient noise levels from use of heavy equipment was examined in the Program EIR. The Noise Element of the San Luis Obispo County General Plan includes maximum allowable noise limits for stationary noise sources (e.g., industrial and commercial facilities; vehicle movements on private property; and impulsive noise, such as hammering) and transportation noise sources (e.g., traffic on public roadways, railroad line operations, and aircraft in flight). Maximum allowable noise levels are more stringent during the nighttime and early morning hours between 10:00 pm and 7:00 am (County of San Luis Obispo 1992). In addition, Section 23.06.040, "Noise Standards," of the San Luis Obispo County Code establishes standards for acceptable exterior and interior noise levels. Noise sources associated with construction are exempt from the County's noise standards, provided that these activities do not take place before 7:00 am or after 9:00 pm any day except Saturday or Sunday, or before 8:00 am or after 5:00 pm on Saturday or Sunday.

Within RMR, treatment activities would occur adjacent to Camp Ocean Pines, a privately-owned children's camp and conference center. Treatments located in the southern portion of CPER and the northern portion of RMR could occur as close as 100 feet from existing noise-sensitive receptors, including residences and hotels. Although there is the potential for prescribed burning to occur during nighttime and weekend hours, other treatment activities using equipment would be limited to daytime hours on Monday through Friday, which would avoid the potential to cause sleep disturbance during the more noise-sensitive evening and nighttime hours. In addition, equipment use would be

intermittent and equipment would move throughout the project area, such that noise increases at any one noise-sensitive receptor would be limited. Furthermore, SPRs AD-3 and NOI-1 through NOI-5 would be implemented. For any properties where noise-sensitive receptors are within 1,500 feet of a treatment area (e.g., residences, hotels, and Camp Ocean Pines), SPR NOI-6 would also apply. This impact is within the scope of the Program EIR because the number and types of equipment proposed, and the duration of equipment use, are consistent with those analyzed in the Program EIR. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT NOI-2

Initial and maintenance treatments would involve large trucks hauling heavy equipment to the project area. Local roads that trucks may use to access the treatment areas include Ardath Drive, Randall Drive, and Main Street. These haul truck trips could pass by residential receptors, and the event of each truck passing by could increase single-event noise levels (SENL). The potential for a substantial short-term increase in SENLs was examined in the Program EIR. This impact is within the scope of the Program EIR because the number and types of equipment proposed are consistent with those analyzed in the Program EIR. The haul trips associated with the proposed treatments would occur during daytime hours on Monday through Friday, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. SPR NOI-1 is applicable to this treatment. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW NOISE IMPACTS

The proposed treatments are within the CalVTP treatable landscape and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.13.1, "Environmental Setting," and Section 3.13.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to noise would occur.

4.13 RECREATION

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	LTS	Impact REC-1, pp. 3.14-6 – 3.14-7	Yes	REC-1	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

IMPACT REC-1

The proposed treatments would occur within CPER, which is owned by CDFW, and within RMR, which is privately owned but managed by the University of California, Santa Barbara. Neither reserve is accessible to the public, with the exception of student researchers hosted at RMR, and does not contain any designated recreation areas as defined in the Program EIR. Recreational areas near the reserves include Covell Ranch, Camp Ocean Pines, Greenspace's Strawberry Canyon and Creekside Reserve, Lampton Cliffs Park, and Cambria Dog Park. Greenspace's Strawberry Canyon and Creekside Reserve are open to the public for hiking trails and access to a Chinese Temple (Greenspace Cambria n.d.). Lampton Cliffs Park and Cambria Dog Park are also open to the public, offering a small hiking trail at Lampton Cliffs Park (California Beaches n.d.) and space for dogs to exercise and socialize at Cambria Dog Park (Cambria Community Services District n.d.). Covell Ranch, adjacent to CPER, is a privately owned ranch offering horseback riding. Camp Ocean Pines, directly adjacent to RMR, is a not-for-profit children's camp and conference center.

Although topography and distance from the reserves would generally minimize disruption of recreational activities in the project vicinity, initial and maintenance vegetation treatment activities have the potential to disrupt recreational activities by degrading the experience of recreationists, including through the creation of noise or degradation of scenic views. The potential for vegetation treatment activities to disrupt recreation activities was examined in the Program EIR. This impact is within the scope of the Program EIR because the availability of recreational resources and the treatment activities and intensity are consistent with those analyzed in the Program EIR. The SPR applicable to this treatment is REC-1. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than covered in the Program EIR.

NEW RECREATION IMPACTS

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.14.1, "Environmental Setting," and Section 3.14.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to recreation would occur.

4.14 TRANSPORTATION

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

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

IMPACT TRAN-1

Initial and maintenance vegetation treatments would temporarily increase vehicular traffic along several roads in the project area, including SR 1, Main Street, and Santa Rosa Creek Road. The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the Program EIR. The proposed treatments would be short term, and temporary increases in traffic related to treatments are within the scope of the Program EIR because the treatment duration and limited number of vehicles (i.e., heavy equipment transport, crew vehicles for crew members) associated with the proposed treatments are consistent with those analyzed in the Program EIR. In addition, the proposed treatments would not all occur concurrently, and increases in vehicle trips associated with the treatments would be dispersed on multiple roadways in two different geographic areas (i.e., CPER and RMR). SPRs applicable to this treatment are AD-3 and TRAN-1. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT TRAN-2

Initial and maintenance treatments would not require the construction or alteration of any roadways. However, the proposed treatments would include prescribed burning, which would produce smoke and could potentially affect visibility along nearby roadways and hauling heavy machinery and operating large trucks along roadways, such that a transportation hazard could occur. The potential for increased hazards due to a design feature or incompatible use was examined in the Program EIR. This impact is within the scope of the activities and impacts addressed in the Program EIR because the burn duration and limited number of large trucks (e.g., hauling equipment) along roadways are consistent with that analyzed in the Program EIR. SPRs applicable to this treatment are AD-3, HYD-2, and TRAN-1. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT TRAN-3

Implementation and maintenance treatments could temporarily increase vehicle miles traveled (VMT) above baseline conditions because the proposed project would require vehicle trips to transport crew members and equipment to the treatment areas and potentially haul vegetative debris to processing facilities. The potential for an increase in VMT on affected roadways during implementation of the treatment project was examined in the Program EIR. This impact was identified as potentially significant and unavoidable in the Program EIR because implementation of the CalVTP as a whole throughout the State would result in a net increase in VMT. Initial treatments are expected to require up to 45 crew members. Chipped, invasive plant, and noxious weed biomass may also be disposed of off-site, increasing the potential for VMT attributable to the project to increase trips per day. A temporary increase in VMT is within the scope of the activities and impacts addressed in the Program EIR because the number and duration of increased vehicle trips, the size and number of crews, and treatment activities are consistent with those analyzed in the Program EIR. The increase in vehicle trips would be temporary and dispersed over multiple roadways.

As discussed for Impact AQ-1 in Section 4.3, "Air Quality," US-LTRCD and CDFW would implement Mitigation Measure AQ-1 to the extent feasible, which includes encouraging carpooling. Carpooling would be encouraged by US-LTRCD and CDFW, but because crews may not all be employed with the same company and due to the project's location, it may not be feasible for most workers. The proposed project would contribute to the cumulative increase in VMT attributable to implementation of the CalVTP. For these reasons, and as explained in the Program EIR, this impact would remain significant and unavoidable. No SPRs are applicable to this impact. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW IMPACTS ON TRANSPORTATION

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.15.1, "Environmental Setting," and Section 3.15.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to transportation would occur.

4.15 PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Impact UTIL-1, p. 3.16-9	Yes	NA	NA	LTS	No	Yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	SU	Impact UTIL-2, pp. 3.16-10 – 3.16-12	Yes	UTIL-1	NA	SU	No	Yes
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Impact UTIL-2, p. 3.16-12	Yes	UTIL-1	NA	LTS	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Public Services, Utilities and Service System Impacts: Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	**Less Than Significant with Mitigation Incorporated**	**Less than Significant**
NA	☐	☐	☐

Discussion

IMPACT UTIL-1

Initial and maintenance treatments would include manual, mechanical, prescribed burning, and herbicide application. Water would be required during implementation of the proposed project as a safety measure for fire suppression, and to minimize dust if excessive while traveling on unpaved roads or to remove visible dirt or mud that gets tracked out onto public paved roadways (per SPR AQ-4). If needed, water would be supplied from water trucks. The potential increased demand for water was examined in the Program EIR. This impact is within the scope of activities and impacts addressed in the Program EIR because the size of the areas proposed for prescribed burn treatments, amount of water

required for prescribed burning and dust control, and water source type are consistent with those analyzed in the Program EIR. No SPRs are applicable to this impact. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT UTIL-2

Initial and maintenance treatments would generate biomass as a result of vegetation removal within the project area. Biomass generated by mechanical and manual treatments would be disposed of with lop and scatter or pile burning or broadcast burning or incineration by specialized biomass processing technologies (e.g., air curtain burning and carbonization) where appropriate. At CPER and RMR, invasive plant and noxious weed biomass may be treated on-site with manual treatments, mechanical treatments, and herbicide application. If invasive plant and noxious weed biomass cannot be treated on-site at CPER and RMR, it may be disposed of off-site at an appropriate waste collection facility. Some biomass may be hauled off-site (e.g., excess chips, invasive plants and noxious weeds). The potential for solid waste generation to exceed state standards or local infrastructure capacity was examined in the Program EIR.

This impact was identified as potentially significant and unavoidable in the Program EIR because biomass hauled off-site could exceed the capacity of existing infrastructure to handle biomass. While the amount of biomass generated is not expected to exceed the capacity of existing local infrastructure in San Luis Obispo County, because the project would potentially generate biomass needing off-site disposal, it could contribute to the environmental significance conclusion in the Program EIR; therefore, for purposes of CEQA compliance, this PSA notes the impact as potentially significant and unavoidable. This impact is within the scope of activities and impacts addressed in the Program EIR because the type and amount of biomass generated that may need to be disposed of off-site are consistent with those analyzed in the Program EIR. SPR UTIL-1 would be applicable to the proposed treatments if biomass is hauled off-site. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT UTIL-3

As discussed above, initial and maintenance treatments would generate biomass as a result of vegetation removal within the project area. Biomass generated by mechanical and manual treatments would be disposed of with lop and scatter or pile burning or broadcast burning or incineration by specialized biomass processing technologies (e.g., air curtain burning and carbonization) where appropriate. At CPER and RMR, invasive plant and noxious weed biomass may be treated on-site with manual treatments, mechanical treatments and herbicide application. If some biomass (e.g., invasive plant and noxious weeds, excess chips) cannot be treated on-site at CPER and RMR, it may be disposed of off-site at an appropriate waste collection facility. If off-site disposal is required, US-LTRCD and CDFW would comply with all federal, state, and local management and reduction goals, statutes, and regulations related to solid waste. Compliance with reduction goals, statutes, and regulations related to solid waste was examined in the Program EIR. This impact is within the scope of the activities and impacts addressed in the Program EIR because the type and amount of biomass that may need to be hauled off-site are consistent with those analyzed in the Program EIR. SPR UTIL-1 would be applicable to the proposed treatments if biomass is hauled off-site. This determination is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW IMPACTS ON PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.16.1, "Environmental Setting," and Section 3.16.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to public services, utilities and service systems would occur.

4.16 WILDFIRE

Impact in the Program EIR			Project-Specific Checklist					
Environmental Impact Covered in the Program EIR	Identify Impact Significance in the Program EIR	Identify Location of Impact Analysis in the Program EIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the Program EIR?	Is This Impact within the Scope of the Program EIR?
Would the project:								
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	LTS	Impact WIL-1, pp. 3.17-14 – 3.17-15	Yes	AD-3 HAZ-2 HAZ-3 HAZ-4	NA	LTS	No	Yes
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Postfire Flooding or Landslides	LTS	Impact WIL-2, pp. 3.17-15 – 3.17-16	Yes	AQ-3 GEO-3 through GEO-5 GEO-8	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the Program EIR for this impact.

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP Program EIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

Discussion

IMPACT WIL-1

Vegetation treatment activities proposed would include mechanical, manual, herbicide application, and prescribed burning treatments. Vegetation treatment involving mechanical equipment could pose a risk of accidental ignition. Temporary increases in risk associated with uncontrolled fire from prescribed burnings could also occur. As discussed in Section 3.17.1, "Environmental Setting," in Volume II of the Final Program EIR, under "Prescribed Burn Planning and Implementation," implementing a prescribed burn requires extensive planning, including the preparation of prescription burn plans, smoke management plans, site-specific weather forecasting, public notifications, safety considerations, and ultimately favorable weather conditions so a burn can occur on a given day. Prior to implementing a prescribed burn, fire containment lines would be established surrounding the designated burn area to help prevent the accidental escape of fire. Water containers and safety equipment would be staged on-site as necessary.

The potential increase in exposure to wildfire during implementation of treatments was examined in the Program EIR. Increased wildfire risk associated with the use of heavy equipment in vegetated areas and with prescribed burns is within the scope of the Program EIR because the types of equipment and treatment duration and the types of prescribed burn methods proposed as part of the project are consistent with those analyzed in the Program EIR. SPRs applicable to this impact are AD-3, HAZ-2, HAZ-3, and HAZ-4. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

IMPACT WIL-2

Vegetation treatment activities would include prescribed burning, which would be low severity and typically retain a mosaic of vegetation including root systems, thereby maintaining stability of the soil. The potential for post-fire landslides and flooding was evaluated in the Program EIR. 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 Program EIR because the equipment types and duration, and methods of prescribed burn implementation are consistent with those analyzed in the Program EIR. SPRs applicable to this impact are AQ-3, GEO-3 through GEO-5, and GEO-8. Furthermore, because the treatments reduce wildfire risk, they would also decrease post wildfire landslide and flooding risk in areas that could otherwise burn in a high-severity wildfire without treatment. This impact of the proposed project is consistent with the Program EIR and would not constitute a substantially more severe significant impact than what was covered in the Program EIR.

NEW IMPACTS ON WILDFIRE

The proposed treatments are entirely within the geographic scope of the CalVTP and are consistent with the treatment types and activities covered in the CalVTP Program EIR. US-LTRCD and CDFW considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP Program EIR (refer to Section 3.17.1, "Environmental Setting," and Section 3.17.2, "Regulatory Setting," in Volume II of the Final Program EIR). For the reasons described above, impacts of the proposed treatment project are consistent with those covered in the Program EIR. No changed circumstances are present. Therefore, no new impact related to wildfire would occur.

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Attachment A

Coastal Vegetation
Treatment Standards

Coastal Vegetation Treatment Standards Cambria Reserves Restoration and Vegetation Treatment Project

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

   Response: The Cambria Reserves Restoration and Vegetation Treatment Project (project) will comply with the applicable requirements of the California Vegetation Treatment Program (CalVTP) Program EIR. The Project-Specific Analysis (PSA) prepared for the project provides the details regarding the CalVTP treatment types and activities that would be implemented under the project, and the applicable Standard Project Requirements (SPR) and mitigation measures that would be implemented. As evidenced therein, the project complies with and will carry out the applicable requirements of the CalVTP Program EIR.

2. Project-Specific Analyses (PSAs) shall be submitted to the California Coastal Commission (CCC) for review and approval pursuant to the Upper Salinas-Las Tablas Resource Conservation District's (US-LTRCD) *Forest Health and Fire Resilience Public Works Plan* (PWP) 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.

   Response: The PSA for the Cambria Reserves Restoration and Vegetation Treatment Project was submitted to the CCC staff for review on March 3, 2022. Prior to submitting the PSA, US-LTRCD (project proponent) and California Department of Fish and Wildlife (CDFW) (project partner) staff conducted a site visit to the University of California Natural Reserve System's Kenneth S. Norris Rancho Marino Reserve (RMR) and Cambria Pines Ecological Reserve (CPER) with CCC staff on November 3, 2022. During this meeting, the group visited both reserves to observe existing ecological conditions, discuss the identified treatment objectives and activities for each reserve, and receive initial feedback from CCC staff on the proposed approach to the analysis.

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 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.

   Response:
   Problem Statement: Forested landscapes across coastal areas of California are undergoing significant change. The climate is changing with more extreme weather including long periods of warmer and drier conditions interspersed with shorter periods of record precipitation. This along with human development including residential, commercial, industrial, and agricultural activities have imposed stresses (e.g., habitat loss, fire suppression) on California's native habitats and endemic species and tree mortality and forest disease has taken a severely adverse toll on regional ecosystems and overall forest health. At the same time, drier site conditions and overstocked forests are displacing 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 promote climate resilience for coastal zone forests and surrounding communities. The Monterey pine forests at CPER and RMR are part of the Pico Creek-Cambria stand, one of the three natural stands of the species in mainland California. Fire suppression and exclusion, prolonged drought conditions, and climate- and disease-induced demographic shifts at both CPER and RMR have resulted in overstocked Monterey pine forest with a dense understory and dense tree canopy, increased nonnative, invasive plants, and high rates of disease and suppressed growth. Dense understory, continued accumulation of dry, dead vegetation, and increased tree canopy creates a fuel ladder that risks a catastrophic, stand-replacing wildfire. In the event of a wildfire at RMR, the existing vegetation conditions could lead to extreme fire behavior, which is a

substantial risk to the adjacent children's camp and residences. Extreme fire behavior can also result in the loss of all ages of Monterey pine in the stand. In addition, within CPER, Monterey pine is encroaching on other habitats and species, such as coastal prairie and La Cruz manzanita, a rare plant.

Goal Statement: The proposed vegetation treatment activities support the intent of the PWP's forest health and fire resilience program goals, California's climate goals, and the goals of the CCC for the protection of Environmentally Sensitive Habitat Areas (ESHA). Approved projects under the PWP are generally 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 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 goal of the ecological restoration treatments within CPER is to improve ecological health by restoring more natural fire frequencies and providing watershed benefits. This would reestablish the composition, structure, pattern, integrity, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health currently and in the future. The goal of the ecological restoration treatments within RMR is to restore ecosystem processes, native stand conditions, and forestland resiliency. An additional goal within RMR is to reduce the threat of catastrophic wildfire to the surrounding community and Camp Ocean Pines through the establishment of a shaded fuel break.

CPER

The Monterey pine forest at CPER is a mixed-age stand that is part of the Pico Creek-Cambria stand, one of only three naturally occurring Monterey pine stands in the state, though the species has been introduced in many areas. The goals for vegetation treatment within the Monterey pine forest at CPER are to improve forest health through removal of Monterey pine trees that are dead or in irreversibly poor condition, or that pose a safety hazard, and reduce ladder fuels and understory vegetation; to encourage recruitment, enhance regeneration, increase vigor, and promote resiliency to diseases of Monterey pine; and maintain pine dominance in the canopy by reducing oak tree cover and creating openings that allow sunlight to penetrate to the forest floor to prepare a seedbed with reduced competition. The target Monterey pine density within Monterey pine forest would be between 150 and 250 trees per acre. The future desired condition consists of maintaining multiple age classes of Monterey pine with sufficient openings in the forest to allow for regeneration of Monterey pine through fire and thinning that would, through ongoing maintenance treatments over the life of the PSA, approximate conditions of healthy, native reference stands of Monterey pine.

Two other goals of ecological restoration treatments at CPER are to maintain rare plant populations as well as to maintain the assemblage of manzanita species, including the rare La Cruz manzanita, by reducing competition from oak and Monterey pine and maintaining preferred open habitat for this species. The goal of ecological restoration in the coyote brush scrub community is to maintain native shrubs and forbs and reduce the infestation of invasive French broom. The goal of ecological restoration in the coastal prairie habitat is to reduce tree and shrub encroachment and enhance abundance and diversity of native grasses and forbs and maintain rare plant populations by reintroducing fire to reduce thatch. The future desired condition within the coyote brush and coastal prairie habitats, and for La Cruz manzanita and other rare plants known to occur at CPER consists of maintaining these habitats and rare plant populations and minimizing invasive plant cover that would, through ongoing maintenance treatments over the life of the PSA, approximate conditions of healthy, reference

stands of the vegetation alliances present and would maintain the vegetation membership rules for those vegetation alliances, according to the Manual of California Vegetation.

RMR

The Monterey pine forest on RMR is also part of the Pico Creek-Cambria stand, one of the three natural stands of the species in mainland California. The goal for ecological restoration vegetation treatments within the Monterey pine forest at RMR is to protect and restore ecological function of the Monterey pine forest. The treatments would restore ecosystem processes, native stand conditions, and forestland resiliency by selectively thinning dense tree stands, diseased tree populations, and underlying brush to improve forest health, increase climate resiliency, and lessen the risk of catastrophic wildfire. The proposed target Monterey pine density within Monterey pine forest is between 150 and 250 trees per acre. The future desired condition consists of increased habitat quality that allows for natural low-intensity fire events and increased growth and carbon storage capacity in the residual stand.

Similar to the ecological restoration treatments, the shaded fuel break treatments are proposed within Monterey pine forest and riparian woodland habitats, The primary goal of the shaded fuel break is wildfire prevention; however, treatments in these areas may also have ancillary ecosystem restoration benefits. A wildfire at RMR could result in extreme fire behavior which could spread to the reserve's natural resources and the adjacent residences and children's camp. Thinning small diameter trees, addressing excessive continuities of horizontal and vertical ladder fuels, and reducing dead, dying, and irreversibly diseased trees is expected to reduce the threat of catastrophic wildfire to Camp Ocean Pines, a privately owned children's camp inholding adjacent to but outside the treatment area, and its campers, as well as protect the surrounding residents that live in the neighboring community. In addition, the shaded fuel break treatment goals are to create control points to allow firefighters to actively fight wildfire, improve the safety of the singular ingress and egress roadway that serves as an escape route for Camp Ocean Pines, provide value for staging equipment and personnel during fire suppression efforts, and serve as an anchor point to help improve the effectiveness of the fuel break created by the road. The desired condition following treatment is a mosaic of native shrubs spaced 75 to 100 feet between crowns, retention of 75 percent of the native riparian tree canopy within riparian habitat, and healthy and fire resilient forest and woodland stands that would retain the majority of the overstory canopy to maintain shade that would reduce the potential for rapid regrowth of understory vegetation. As funding and other approvals allow, these desired conditions would be maintained through ongoing maintenance treatments.

Environmental protections, including SPRs and mitigation measures, would be implemented by the project proponent and project partner and reported through the Mitigation Monitoring and Reporting Program developed as part of an approved PSA under the CalVTP Program EIR.

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.

   Response: The ecological restoration treatment at CPER is a forest health project; however, it has added benefits of fire prevention. The ecological restoration and shaded fuel break treatments at RMR fall under both the forest health and fire prevention project categories of the PWP. Ecological restoration treatments at both CPER and RMR would restore natural ecosystem processes, conditions, and resiliency through the removal of the degraded overstory of standing dead, dying, and irreversibly diseased Monterey pine trees (e.g., seriously infected with pathogens such as western gall rust [*Peridermium harknessii*] and pine pitch canker [*Fusarium circinatum*]). Invasive species would also be removed from both CPER and RMR. French broom (*Genista monspessulana*), bulbous canarygrass (*Phalaris aquatica*), and pampas grass (*Cortaderia selloana*) are known to occur at CPER.

Approximately 17 acres of shaded fuel break treatments would be implemented at RMR. The shaded fuel break would be created between the neighborhood adjacent to the north boundary of RMR and Camp Ocean Pines and would occur adjacent to Randall Road and extend south for 400 to 500 feet to the bordering property of Camp Ocean Pines. The access road is the only access to Camp Ocean Pines, which receives 5,000 visitors annually and visitors usually spend four nights resulting in 20,000 person nights. The treatment area vegetation type from Randall Road to Camp Ocean Pines is primarily forest (e.g., Monterey pine forest and riparian woodland) and contains slopes approximately 30 to 50 percent. Surface and ladder fuels within the treatment area range from fine to large and woody. Concentrations of downed woody fuel (jackpots) occur sporadically along Randall Road. Vertical and horizontal arrangement of both live and dead fuels within the treatment area could lead to increased rate of spread or an independent crown fire. In conjunction with native plants, a suite of nonnative invasive weeds exists in the fuel break treatment area. Steep topography and dense vegetation could result in extreme fire behavior in the event of a wildfire. Prolonged exposure of children housed at Camp Ocean Pines to hazardous existing fire conditions presents unacceptable risk to a vulnerable population in the community. Therefore, adequate protection is paramount to ensure safety and is necessary in the case of mandatory evacuation or shelter-in-place protocols.

The shaded fuel break is proposed at a greater distance than the applicable defensible space requirement of up to 300 feet. The approximate distance from Randall Road to the access road is 150 feet and 250 feet from the access road to the camp. Measurements made via aerial imagery indicate that distances from Randall Road to the camp vary between 400 and 500 feet. The resulting 400- to 500-foot shaded fuel break width is the approximate sum of the treatment area from Randall Road to the camp, incorporating both sides of the access road and extending to the camp structures. The justification for the width of the fuel break is supported by local California Department of Forestry and Fire Protection (CAL FIRE) representatives (Gee, pers. comm., 2022). A 75-foot WLPZ would be implemented on each side of Strawberry Creek, thereby adding environmental protections to this resource within that portion of the shaded fuel break area. The shaded fuel break treatment would retain the majority of the overstory canopy, including retaining 75 percent of the canopy in the riparian area, to maintain shade, thereby reducing the potential for rapid regrowth of understory vegetation. This approach would support a healthy and fire resilient residual forest stand while also providing emergency responders the opportunity to control or contain wildfires through the modification of flammable vegetation and protect visitors to Camp Ocean Pines.

5. In the coastal zone, 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 Coastal Act Section 30107.5). Rarity determinations for habitats and species are made by CDFW, US Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS), and are used to support a CCC ESHAs determination[1]. 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 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 this district will take place within natural communities that qualify as ESHAs (e.g., Monterey Pine forest, Monterey Cypress, Coast Live Oak, etc.).

   Response: The entirety of the project area, encompassing both reserves, is considered ESHA. Therefore, treatments would occur within vegetation communities that meet the definition of ESHA, including Monterey pine forest (Bishop pine – Monterey pine forest and woodland alliance per the Manual of California Vegetation) present in both CPER and RMR. In addition, coast oak woodland is present at CPER, riparian woodland is present at RMR, and coastal prairie is present at both CPER and RMR. The primary purpose of the project is to conduct

[1] 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.

ecologically restorative treatments by removing dead, dying, and irreversibly diseased trees and reducing tree density to promote the persistence and resiliency of the Monterey pine forest, oak woodland, and riparian woodland, which would directly benefit these ESHAs. In addition, removal of encroaching pines and coyote brush from the coastal prairie at CPER would directly benefit this ESHA by preventing habitat conversion of this vegetation type. The project was designed to provide for a mosaic of appropriate native plants by age, size, and class that would support the overall habitat as detailed in response to item #6 (d) below. In addition, the CalVTP PSA includes SPRs and mitigation measures that would avoid and minimize significant impacts to ESHAs and associated habitat values. Specifically, SPR BIO-8 would be implemented and contains the following requirements to protect ESHAs by protecting the habitat functions that define ESHAs within the treatment areas.

- Treatments must be designed in compliance with the Local Coastal Program (LCP) 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 are 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 registered professional forester (RPF) familiar with the ecology of the treatment area will monitor all treatment activities in ESHA.

Please refer to Impact BIO-3 in the PSA as well as the response to item #6 below for more details on ESHA, habitat and vegetation types within the treatment area, and additional measures that will be implemented to protect the ecosystem.

6. In addition to the requirements of the CalVTP Program EIR, 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[2]; and (d) provide for a mosaic of appropriate native plants by age, size, and class that support the overall habitat function. 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.

   Response:

   (a) The project would enhance habitat function in the treatment areas at CPER and RMR by removing dead and dying vegetation, removing invasive vegetation, treating successional vegetation to restore ecosystem processes and natural fire regimes, which would promote long-term storage of carbon. Information on forest modeling[3] was reviewed as presented in the Coastal VTS consistency documentation for the Covell Ranch Forest Health Fuels Reduction Project, which is adjacent to this proposed project. This forest modeling showed that ecologically restorative treatments in Monterey pine habitat that focus on understory thinning from 8 to 12 inches in tree diameter show a positive carbon benefit over a 60-year modeling period. Similar treatment activities are proposed at both CPER and RMR and therefore are expected to also have a positive carbon benefit to the ecosystem at CPER and RMR over the long-term.

[2] 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.

[3] Forest modeling was conducted through the federal Forest Vegetation Simulator program using representative data from Monterey pine in the Año Nuevo stand on Cal Poly Swanton Pacific Ranch in Santa Cruz.

Treatments at both CPER and RMR would facilitate natural regeneration of indigenous Monterey pine forest that existed in the treatment areas historically. The indigenous Monterey pine forest in the treatment areas, which is part of one of three native stands of Monterey pine in mainland California, is being encroached upon by oak trees (at CPER) and overstocked Monterey pine tree densities (at CPER and RMR) that are inhibiting natural seedling growth and establishment. Treatments within forest habitat types at CPER and RMR are anticipated to result in a healthy and diverse understory because thinning of smaller diameter trees and understory woody vegetation would let additional sunlight reach the forest floor. In addition, forest density would be targeted to approximately 150 to 250 trees per acre of mid-range and larger diameter trees. This would facilitate the growth of remaining trees to achieve greater heights, trunk diameter, and crown expansion. The resulting forest would be more vigorous and able to resist vegetation pattern transformations that can occur in a changing climate, with reduced continuity of hazardous ladder fuels (i.e., smaller trees) to the canopy. The desired condition following treatment would be reestablishment of indigenous Monterey pine forest to mimic characteristics of a more resilient mixed age stand within the CPER and RMR treatment areas.

The treatments within the coastal prairie community within the CPER treatment area would prevent conversion of this habitat to another vegetation alliance (e.g., coyote brush scrub or Monterey pine forest) and enhance the habitat function of this community by reintroducing fire within the natural fire return interval to promote increased abundance and diversity of perennial grasses and forbs.

Treatments within the riparian woodland at RMR would retain 75 percent of the native riparian tree canopy and 50 percent of the understory and selective thinning would help promote a healthier and more resilient riparian community. Removed trees would be felled away from Strawberry Creek and piled outside of the WLPZ. No pile burning nor use of terrestrial or aquatic herbicides would occur within the WLPZ. Manual treatment would be utilized in the WLPZ to reduce ground disturbance and potential erosion into the waterway. Removal of invasive species in the riparian woodland would improve habitat function, reduce the risk of extreme fire behavior, and enhance cover and diversity of native plants through reduced competition.

In addition, SPRs and mitigation measures are identified in the PSA that would protect the ecosystem. Measures include the following:

- Biological and botanical surveys will occur prior to treatment and avoidance and minimization measures will be implemented for identified resources, such as those summarized here (for full measures see Attachment B1 for RMR and Attachment B2 for CPER):
  - Special-status plant surveys will be conducted on RMR prior to initial treatment to identify and map special-status plants within the treatment area. If any are identified in the treatment area, a no-disturbance buffer will be implemented prior to treatment. Floristic surveys identifying every species encountered have already been conducted on CPER during 2022 and previous years.
  - Surveys for special-status birds will be conducted prior to treatments that would occur between February 1 and August 31 and impacts to any identified nest would be avoided through the establishment of no-disturbance buffers.
  - California red-legged frog surveys and biological monitoring will be carried out at RMR prior to treatments at any time of year within upland habitat, and during the dispersal season and following precipitation events within dispersal habitat, and mechanized equipment and herbicides will not be used following precipitation events to protect California red-legged frog at RMR and CPER (see bullet point below).
  - Special-status amphibian and reptile surveys will be conducted within habitat suitable for Coast Range newt, two-striped gartersnake, and western pond turtle (or the species will be assumed present), monitoring would occur if any of the species were observed during surveys or assumed present, and western pond turtle nests would be avoided through the establishment of buffers.
  - Pallid bat and Townsend's big-eared bat surveys will occur prior to treatments that occur from April 1 to August 31, a no-disturbance buffer of 250 feet would be established around active pallid or

Townsend's big-eared bat roosts, and mechanical, manual, and prescribed burning treatments would not occur within this buffer. The distance of this buffer may be adjusted by a qualified RPF or biologist to account for topography, vegetation, or other screening that may reduce the effects of disturbance.

- Ringtail den surveys prior to operations that occur from April 15–June 30 will be conducted, and no-disturbance buffers would be established around any identified active dens.

- No mechanized equipment, including track chippers, and herbicide treatments will occur for 24 hours following any precipitation event of 0.20 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches.
- Mechanized operations with heavy equipment will only occur on slopes less than 65 percent or on slopes less than 50 percent where the erosion hazard rating is high or extreme.
- Areas with substantial soil disturbance (i.e., exposure of bare soil over 50 percent or more of the treatment area) following treatment will be stabilized using mulch or equivalent.
- Erosion control measures will be implemented and inspected, and monitoring for erosion will occur after the first large storm of the season following mechanical and prescribed burning treatments.
- Waterbreaks will be used to drain stormwater on compacted soils and bare treatment areas.
- No heavy equipment operations within a Watercourse and Lake Protection Zone (WLPZ) will occur, or within 30 feet of a Class III watercourse (other than to travel over an existing crossing).
- Only herbicides labeled for use in aquatic environments will be used when working in areas where there is a possibility the herbicide could come into direct contact with water. All herbicide use would be subject to the California red-legged frog injunction, and would follow the requirements of SPRs HAZ-5, 6, 7, 8, and 9, as well as SPR HYD-5. Together, these SPRs would avoid and minimize adverse effects to sensitive ecological resources by requiring buffers around special-status plants and water features, prohibiting application when weather parameters exceed label specifications or when sustained wind at the site of application exceeds 7 miles per hour, prohibiting application during or immediately prior to precipitation events, complying with all herbicide application regulations, and preparing and implementing a Spill Prevention and Response Plan.
- Specific measures will be implemented to reduce the spread of forest pathogens such as pitch canker, including cleaning vehicles and hand tools prior to use.
- Pre-operational training with the contractors will be conducted to advise them of key resource issues, environmentally protective regulations, SPRs, and mitigation measures.

Please see the PSA for additional details on applicable SPRs and mitigation measures.

(b) (c) The PSA for the project analyzes the potential impacts of the project on vegetation, wildlife, and maintenance of sensitive natural communities within the membership rules of the MCV. As discussed under item #6 (a) above, treatments in forested and woodland habitats would facilitate natural regeneration of indigenous Monterey pine forest at densities that existed in the treatment area historically, avoid type conversion, maintain habitat function, and result in healthier vegetation communities that are able to resist vegetation pattern transformations under a changing climate while reducing the continuity of hazardous ladder fuels to the canopy. In non-forest habitat types (e.g., coastal prairie) type conversion would be avoided, and habitat function maintained. The restoration of historic vegetation types and maintenance of vegetation cover would result in conditions that would reflect natural fire frequencies for the area.

(d) The project would provide for a mosaic of appropriate native plants by age, size, and class that support the overall habitat within the treatment areas by following a specific treatment prescription, including:

CPER

- Retain native live trees greater than 8 inches dbh (with the exception of hazard or severely diseased trees, which would be selectively thinned), unless needed to promote recruitment;
- retain 150 to 250 trees per acre in pine forest;
- protect rare plants including La Cruz manzanita;
- cut and pile standing dead trees/shrubs and downed woody debris up to 24 inches in diameter, while retaining at least three to five snags per acre with a preference for the largest snags and logs that exhibit the form and decay characteristics favored by wildlife)
- retain mature oaks unless irreversibly diseased, dying, or if they pose a hazard;
- retain native shrubs (e.g., toyon, gooseberry, and snowberry) and other desirable species in a mosaic to best mimic a natural fire regime as at an approximate spacing of 75–100 feet between crowns, where the combined crown for each clump is approximately 15–25 feet wide; however, distances between crowns may be greater if needed to mimic the natural fire regime as determined by a qualified biologist or RPF; and
- retain coastal prairie dominated by native species by removing encroaching pines and coyote brush.

RMR

- Retain native live trees greater than 8 inches dbh and live woody shrubs, while maintaining retention standards listed in the PSA, including the below;
- retain 150 to 250 trees per acre and three to five snags per acre with a preference for the largest snags that exhibit the form and decay characteristics favored by wildlife;
- retain a 15–20 foot spacing between retained trees under 8 inches dbh;
- retain woodrat middens for wildlife habitat;
- retain woody debris in strategic locations to maintain forest floor complexity while reducing fuel connectivity. While masticating, operators would minimize disturbance to down wood greater than 12 inches in diameter where feasible, only moving large pieces of woody debris when necessary to reduce fire behavior or gain access to larger portions of treatment areas, with a per acre retention target of 1–4 downed logs 15 feet in length and greater than or equal to 12 inches in diameter (Strong et al. 2016) per acre with a preference for the largest logs that exhibit the form and decay characteristics favored by wildlife;
- retain at least 75 percent of native riparian tree canopy and 50 percent of the understory within riparian woodland habitat;
- retain existing native herbaceous species to the extent practicable in ecological restoration treatments;
- outside of riparian areas, generally retain a minimum of 5–10 percent herbaceous understory vegetation per acre in a mosaic pattern; and
- retain a mosaic of native shrubs with 75 to 100 feet of space between crowns, where the combined crown for each clump is approximately 15 to 25 feet wide. Retention of less common native shrubs (i.e., coffeeberry and toyon) would be prioritized over common shrubs.

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 RPF 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 vegetation 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.

Response: The project would follow the vegetation removal hierarchy described in the PWP's Coastal VTS for projects in the Coastal Zone and would not result in unintended habitat type conversion at the alliance level (i.e., would not result in conversion to another vegetation alliance). The removal of endangered, threatened, rare or otherwise especially valuable species and habitats would be avoided as discussed in item #6, "Protect Ecosystem," above, except for the selective removal of Monterey pine from coastal prairie and where stand density is not reflective of healthy Monterey pine forest stands. Initial treatments would first remove dead, dying, and irreversibly diseased vegetation and invasive plant species, and at CPER, would then remove select individual coast live oaks and mature Monterey pines. Most live native trees greater than or equal to 8 inches dbh would be retained. This treatment would increase the growth and vigor of any remaining live trees of all species, including indigenous Monterey pine, by reducing resource competition with small-diameter Monterey pine trees, coast live oak, large woody shrubs, and irreversibly diseased trees. In addition, the treatment would reduce fuel loads thereby protecting the continued natural regeneration of indigenous Monterey pine and other native vegetation communities from additional high intensity fire. The PSA provides additional discussion on the benefit to the Monterey pine vegetation alliance and coastal prairie vegetation alliances from the removal of individual Monterey pine plants (see Section 4.5, "Biological Resources," in the PSA). Therefore, while initial treatments may result in alteration of species composition within sensitive natural communities, the result would be representative of appropriate native habitat in the treatment area and a naturally occurring sensitive natural community (i.e., Monterey pine forest) under a more natural disturbance regime. Type conversion would not occur in coast live oak habitat because limited coast live oak tree removal would only occur in Monterey pine stands. Maintenance treatments would be conducted using mechanical and manual treatments to remove hazard trees, understory vegetation, and ladder fuels, reduce the reestablishment of invasive species, and would follow the same SPRs and mitigation measures as discussed in item #6, "Protect Ecosystem." These initial and maintenance treatments would increase and maintain the growth and vigor of any remaining live trees of all native species. In addition, the treatments would reduce fuel loads to protect the regeneration of native vegetation and restore habitat conditions, including habitat quality and natural fire processes, while protecting existing structures and infrastructure.

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 Lake and Streambed 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.

Response: The large volume of dead and dying vegetation within the treatment area makes avoiding the use of all heavy equipment during treatment infeasible. The project would use manual and mechanical treatment activities, as well as herbicide application and prescribed burning. Heavy mechanical equipment would only be used when necessary to achieve project objectives and would remain on existing roads to the extent feasible. The project would implement SPR GEO-2, GEO-7, and HYD-4, as well as several other SPRs and mitigation measures, to reduce impacts from heavy equipment use (e.g., limiting heavy equipment use on steep slopes to minimize

erosion). No heavy equipment will be used adjacent to Strawberry Creek, in the riparian area identified at RMR. No riparian habitat is present in the CPER treatment area.

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.

Response: Herbicides would be used during initial and maintenance treatments to control invasive plant species when manual removal methods are not a viable or effective option. Herbicide use at CPER is proposed to control French broom, bulbous canarygrass, and pampas grass. Herbicide use at RMR is predominantly expected to occur near roads and trails. Herbicides would only by applied through targeted, hand-held devices and no aerial spraying would occur. All herbicide use would be subject to the California red-legged frog injunction, and would follow the requirements of SPRs HAZ-5, 6, 7, 8, and 9, as well as SPR HYD-5. Together, these SPRs would avoid and minimize adverse effects to sensitive ecological resources by requiring buffers around special-status plants and water features, prohibiting application when weather parameters exceed label specifications or when sustained wind at the site of application exceeds 7 miles per hour, prohibiting application during or immediately prior to precipitation events, complying with all herbicide application regulations, and preparing and implementing a Spill Prevention and Response Plan.

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.

Response: Prescribed herbivory would not occur under the proposed project at CPER or RMR.

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.

Response: The project would implement SPR BIO-6 and BIO-9 for all treatment activities in all vegetation types to limit the spread of invasive species, including French broom, and plant pathogens, such as sudden oak death and pine pitch canker. Invasive species in the treatment area would be controlled via manual methods (e.g., hand pulling) and targeted use of herbicides via hand-held devices. SPR-BIO-4 provides protections for riparian habitats and would be implemented at RMR in identified riparian habitat. SPR BIO-4 would not apply at CPER, because no riparian habitat has been identified in the CPER treatment area. SPR BIO-6 requires implementation of best management practices to prevent the spread of plant pathogens and SPR BIO-9 requires implementation of measures to prevent spread of invasive plants and noxious weeds.

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.

Response: Prescribed herbivory is not proposed as part of the project and no associated fencing would be used.

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.

Response: Accelerants may only be used for use for pile burning and broadcast burning treatments at CPER and RMR and will be burned off during these activities. Accelerants will not be used within WLPZs, wetland buffers, and within 50 feet of special-status plants. See the response to item #5 above for additional discussion and protection measures regarding ESHA.

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

Response: No riprap or chemical soil stabilizers are proposed for use as part of the project.

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.

Response: The project occurs within CPER and RMR. CPER is a reserve owned by CDFW and not located adjacent to the coast nor does it provide public access to the coast. RMR is part of a reserve managed by the University of California, Santa Barbara as a research station. It does not provide public access to the coast. Therefore, the project would have no impact on coastal public access or public recreation.

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Attachment B1

Mitigation Monitoring and Reporting Program for the Cambria Reserves Restoration and Vegetation Treatment Project – Rancho Marino Reserve

Cambria Reserves Restoration and Vegetation Treatment Project - Rancho Marino Reserve

Mitigation Monitoring and Reporting Program

CalVTP Project ID: 2022-36

Prepared for:

UPPER SALINAS-LAS TABLAS RESOURCE CONSERVATION DISTRICT

April 2023

Mitigation Monitoring and Reporting Program (MMRP) for the

Cambria Reserves Restoration and Vegetation Treatment Project—Rancho Marino Reserve

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April 2023

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project because the Project Specific Analysis (PSA) identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. Standard project requirements (SPR), which are part of the project description, have been incorporated to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. While only mitigation measures are required to be covered in an MMRP, both SPRs and mitigation are included in this MMRP to assist in implementation of all environmental protection features of later activities consistent with the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (Program EIR).

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to facilitate the implementation of SPRs and mitigation measures. The Cambria Reserves Restoration and Vegetation Treatment Project (project) consists of vegetation treatments on up to 291 acres of land within two separate reserves. The Upper Salinas-Las Tablas Resource Conservation District (US-LTRCD) is proposing to implement vegetation treatment on up to 187 acres of land within the University of California Natural Reserve System's Kenneth S. Norris Rancho Marino Reserve (RMR). The California Department of Fish and Wildlife (CDFW) is proposing to implement vegetation treatments on up to 104 acres of land within CDFW's Cambria Pines Ecological Reserve (CPER). Two MMRPs have been prepared to help facilitate the implementation of SPRs and mitigation measures for each reserve; the measures in this MMRP are only applicable to the vegetation treatments on RMR.

The attached table presents the text of each SPR and mitigation measure from the CalVTP Program EIR that is applicable to the portion of the project on RMR, the timing of its planned implementation, the implementing entity, and the entity with monitoring responsibility. The numbering of SPRs and mitigation measures follows the numbering used in the Program EIR. SPRs and mitigation measures that are referenced more than once in the PSA are not duplicated in the MMRP. Instructions for project-specific implementation of certain SPRs and mitigation measures have been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, and the conditions and resources present within each treatment site. In addition, non-substantive clarifying edits to mitigation measures in the Program EIR are shown in underline and strikethrough. In all cases, the additional project-specific implementation instruction and clarifying edits to mitigation measures maintain the SPRs and mitigation measures as equivalent or more effective than those presented in the Program EIR.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, US-LTRCD is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. US-LTRCD, as the project proponent, will be responsible for implementation of mitigation measures pursuant to Section 15097 of the State CEQA Guidelines.

REPORTING

US-LTRCD shall document and describe the compliance of the project treatment work with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

Pursuant to the US-LTRCD certified Public Works Plan (PWP), US-LTRCD shall provide monitoring reports in accordance with the requirements of the SPRs and mitigation measures in the MMRP (below) following implementation of the project. US-LTRCD shall maintain a record of monitoring reports in their office, which shall be made available for public review. US-LTRCD shall submit a copy of each monitoring report for the review and written approval of the Executive Director of the Coastal Commission within ten days of its completion. The monitoring reports shall be substantially consistent with the requirements of SPR AD-7 (and any other reporting required under the CalVTP) and shall be submitted after each completed phase of development (as such phases are described in the Notice of Impending Development). The monitoring reports shall describe compliance with PWP protection measures, progress of treatment activities (including initial and maintenance treatments), lessons learned, post-treatment evaluations for adaptive management purposes (including through photos documenting treatment areas before and after treatment), and an assessment of any changes in conditions that may affect project consistency with the PWP. The monitoring reports required by the Coastal Commission pursuant to the PWP also provide opportunity to consider the need for adaptive management and an assessment of any changes in conditions that may affect project consistency with the PWP.

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP table are described below.

- SPRs and Mitigation Measures – This column provides the text of the applicable SPR or adopted mitigation measure.
- Timing – This column identifies the time frame in which the SPR or mitigation measure will be implemented.
- Implementing Entity – This column identifies the party responsible for implementing the SPR or mitigation measure.
- Verifying/Monitoring Entity – This column identifies the party responsible for verifying and monitoring implementation of the SPR or mitigation measure.

QUALIFICATION REQUIREMENTS FOR BIOLOGICAL AND CULTURAL RESOURCE MEASURES

The biological and cultural resource SPRs and mitigation measures in the attached MMRP table require that qualified individuals implement components of the measures. The CalVTP Program EIR requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including biologist, botanist, ecologist, Registered Professional Forester (RPF), biological technician, or supervised designees working at the direction of a qualified professional) as long as they are qualified for the task at hand.

Archaeologically Trained Resource Professional: To be qualified, an archaeologically-trained resource professional would hold a valid Archaeological Training Certificate issued by CAL FIRE and the Board of Forestry and Fire Protection or equivalent state or local agency training or certification. Work performed by an archaeologically-trained resource professional must be reviewed and approved by a qualified archaeologist.

Qualified Archaeologist: To be qualified, an archaeologist would hold a Prehistoric Archeology, Historic Archeology, Conservation, Cultural Anthropology, or Curation degree from an accredited university and meet the Secretary of Interior's Qualifications Standards (36 CFR Part 61). The project proponent will review the resume and approve the qualifications of the archaeologists.

Qualified RPF or Biological Technician: To be qualified, an RPF or biological technician would 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting biological monitoring of relevant species or resources, and 4) be knowledgeable about state and federal laws regarding the protection of special-status species. The project proponent will review the resume and approve the qualifications of RPFs or biological technicians.

Qualified RPF or Biologist: To be qualified, an RPF or biologist would hold a wildlife biology, botany, ecology, forestry, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be knowledgeable about state and federal laws regarding the protection of special-status species, and 6) have experience with California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and approve the qualifications of RPFs or biologists. If species-specific protocol surveys are performed, surveys would be conducted by qualified RPFs or biologists with the minimum qualifications required by the appropriate protocols, including having CDFW or US Fish and Wildlife Service (USFWS) approval to conduct such surveys, if required by certain protocols.

Qualified RPF or Botanist: To be qualified, an RPF or botanist would 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018), or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor, 4) be familiar with the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/), and 5) be familiar with federal, state, and local statutes and regulations related to plants and plant collecting. The project proponent will review the resume and approve the qualifications of RPFs or botanists.

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
Administrative Standard Project Requirements			
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment activities.	US-LTRCD	US-LTRCD
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.	Prior to treatment activities.	US-LTRCD	US-LTRCD
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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD
SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	At least three days prior to the commencement of prescribed burning operations.	US-LTRCD	US-LTRCD
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.	During treatment activities.	US-LTRCD	US-LTRCD
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	One to three days prior to the commencement of a treatment activity.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP Program EIR for CEQA compliance, the project proponent will provide the information listed below to the Board of Forestry and Fire Protection (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), or project latitude/longitude; ▶ 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 (following initial treatment): ▶ 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.	During the proposed, approved, and completed stages of the project. **Information on the proposed project (PSA in progress) was submitted to the Board on December 19, 2022.**	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Prior to all treatment activities. **Coastal Act Compliance for this project is achieved through Coastal Commission approval of the PSA and Coastal VTS.**	US-LTRCD	US-LTRCD
Aesthetic and Visual Resource Standard Project Requirements			
SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	During mechanical and manual treatment activities.	US-LTRCD	US-LTRCD
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.	During all treatment activities.	US-LTRCD	US-LTRCD
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 all treatment types, including treatment maintenance.	During all treatment activities.	US-LTRCD	US-LTRCD
Air Quality Standard Project Requirements			
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During all treatment activities.	US-LTRCD	US-LTRCD
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air	Prior to prescribed burn	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	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. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Prior to prescribed burn treatment activities; does not apply to pile burning.	US-LTRCD	US-LTRCD
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.	During all treatment activities.	US-LTRCD	US-LTRCD
SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during	During prescribed burn treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.			
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if records search remains valid. **A complete record search of the 291-acre project area has been conducted; see PSA for a summary of results. Compliance with this SPR is complete.**	US-LTRCD	US-LTRCD
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if records search remains valid. **Outreach to the NAHC has occurred, Tribes have been**	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	contacted and a SLF query has been completed; see PSA for a summary of consultation and Sacred Lands File query results.		
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if research remains valid.	US-LTRCD	US-LTRCD
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if initial surveys remain valid.	US-LTRCD	US-LTRCD
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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD
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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD
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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD
Biological Resources Standard Project Requirements			
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this Program EIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior	Prior to treatment activities. **Initial data review and reconnaissance-level survey have been conducted; see PSA for summary of results.**	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist. **Project-Specific Implementation** <u>Special-Status Plants</u> ▶ For special-status plants not listed under CESA or ESA, to avoid impacts on the annual and geophyte species identified in Attachment C, only non-ground-disturbing treatment activities (i.e., manual treatments, herbicide application, and prescribed burning) will be implemented and only during the dormant season for these species (i.e., when the plant has no aboveground parts), which would generally occur during the winter, if feasible, provided the treatment would not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment, or destroy seedbanks, stumps, or roots, rhizomes, bulbs and other underground parts of these species. If the limited operating period for annual and perennial geophyte species (i.e., only non-ground-disturbing treatment activities conducted during the dormant season) is determined to be infeasible, then protocol-level surveys will be required per SPR BIO-7. Note that ground-disturbing treatment activities (i.e., mechanical treatments) may result in impacts on these plant species even when dormant and will not be conducted without prior implementation of SPR BIO-7. <u>Special-Status Wildlife</u> ▶ To avoid impacts on special-status nesting birds, mechanical treatments, manual treatments, herbicide application, and prescribed burning would not be implemented from February 1 to August 31, if feasible. If conducting some treatments outside of the nesting bird season is determined to be infeasible, then SPR BIO-10 will be implemented. ▶ To avoid impacts on overwintering monarch butterflies, treatments within tree stands suitable for overwintering monarchs will be conducted outside of the overwintering season (September through March). If it is not feasible to avoid certain treatments during the monarch overwintering season, SPR BIO-10 will be implemented. ▶ To avoid impacts on ringtail, manual treatment, mechanical treatments, and prescribed burning activities would not be implemented during the sensitive season (from April 15 to June 30), if feasible. If conducting some mechanical, manual, and prescribed burning	Prior to and during treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
treatments outside of the ringtail maternity season is determined to be infeasible for certain treatments, then SPR BIO-10 will be implemented. ▶ To avoid impacts on special-status bat maternity colonies, mechanical treatments, manual treatments, and prescribed burning would not be implemented during the sensitive season (from April 1 to August 31), if feasible. If it is infeasible to conduct mechanical treatments, manual treatments, and prescribed burning outside the sensitive season, SPR BIO-10 will be implemented. 2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** <u>Special-Status Wildlife</u> ▶ Because there is no reliable season during which all impacts on California red-legged frog, Coast Range newt, two-striped gartersnake, western pond turtle, Crotch bumble bee, Monterey dusky-footed woodrat, or mountain lion could be avoided and avoidance of habitat is not feasible for these species, implementation of SPR BIO-10 would be required for these species.			
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.	Prior to treatment activities.	US-LTRCD	US-LTRCD
Sensitive Natural Communities and Other Sensitive Habitats			
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will: ▶ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the	Prior to all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ 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) (2020 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., Monterey pine forest and woodland, coast 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 *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD
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."	Prior to all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this Program EIR, surveys will not be required under the following circumstances: ▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** ▶ For special-status plants not listed under ESA or CESA, if the limited operating period for annual and perennial geophyte species (i.e., non-ground-disturbing treatment activities conducted during the dormant season) is determined to be infeasible, then protocol-level surveys for these species will be conducted prior to implementation of treatments. ▶ Protocol-level surveys will be conducted for special-status plants listed under ESA or CESA and perennial non-listed species (with the exception of Monterey pine because this species will benefit from treatments) prior to implementation of treatments.			
Environmentally Sensitive Habitat Areas			
SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this Program EIR, 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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ 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.			
Invasive Plants and Wildlife			
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; ▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; ▶ 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.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
Wildlife			
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** Applicable to the following species: ▪ California red-legged frog ▪ Coast Range newt ▪ Two-striped gartersnake ▪ Western pond turtle ▪ Bald eagle ▪ Grasshopper sparrow ▪ Crotch bumble bee ▪ Monarch butterfly ▪ Monterey dusky-footed woodrat ▪ Ringtail ▪ Pallid bat ▪ Townsend's big-eared bat ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, for treatment activities that occur in habitat suitable for California red-legged frog, protocol surveys will be conducted by a qualified biologist or RPF following the guidelines provided by USFWS (2005), or presence of the species will be assumed. If presence is assumed or the species is detected during protocol surveys, Mitigation Measure BIO-2a will be implemented. ▶ Because habitat avoidance pursuant to SPR BIO-1 is not feasible, to avoid impacts on Coast Range newt and two-striped gartersnake, focused surveys for Coast Range newt and two-striped gartersnake will be conducted by a qualified biologist or RPF within habitat suitable for these species prior to implementation of mechanical, manual, herbicide application, and prescribed burning treatments,	No more than 14 days prior to all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
or presence of the species will be assumed. If Coast Range newt or two-striped gartersnake are identified during focused surveys or assumed present, Mitigation Measure BIO-2b will be implemented. ▶ Because habitat avoidance pursuant to SPR BIO-1 is not feasible, to avoid impacts on western pond turtle, focused surveys for individuals and nests will be conducted prior to treatment activities that occur in habitat suitable for western pond turtle, or presence of the species will be assumed. If western pond turtles are detected during focused surveys or presence assumed, Mitigation Measure BIO-2b will be implemented. ▶ If it is not feasible to avoid all treatments during the nesting bird season (February 1 through August 31) pursuant to SPR BIO-1, then focused surveys (i.e., nest searches) for nests of bald eagle and grasshopper sparrow will be conducted prior to implementing treatment activities during the nesting bird season. If nesting special-status birds are detected during focused surveys, Mitigation Measure BIO-2a or BIO-2b will be implemented depending on the species detected. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, to avoid impacts on Crotch bumble bee, surveys will be conducted by a qualified biologist or RPF within habitat suitable for Crotch bumble bee prior to implementation of mechanical, manual, herbicide application, and prescribed burning, or presence of this species in suitable habitat will be assumed and Mitigation Measure BIO-2g will apply. ▶ If it is not feasible to avoid mechanical, manual, and prescribed burning treatments during the monarch overwintering season (September through March) pursuant to SPR BIO-1, then the following will be implemented to avoid impacts to special-status overwintering monarch butterflies: ▪ A qualified RPF or biologist will assess the project area for stands suitable for overwintering monarch butterflies and overwintering activity. ▪ If overwintering stands suitable for monarch are present within the project area, these stands will be recorded and surveyed for overwintering monarchs prior to treatment activities occurring in those stands during the overwintering season. ▪ If overwintering monarchs are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, to avoid impacts on Monterey dusky-footed woodrat, focused surveys for middens will be conducted prior to treatment activities that occur in habitat suitable for Monterey dusky-footed woodrat. If Monterey dusky-footed woodrat middens are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, for treatment activities that occur in habitat suitable for foraging mountain lions, presence of the species will be assumed and Mitigation Measure BIO-2a will be implemented. ▶ If it is not feasible to avoid mechanical treatments, manual treatments, or prescribed burning activities during the ringtail maternity season (pursuant to SPR BIO-1), focused surveys for ringtail will be conducted using trail cameras, track plates, and other non-invasive survey methods to determine whether ringtails are present within the treatment area. Surveys will be conducted by a qualified RPF or biologist with a valid CDFW Scientific Collecting Permit, or presence may be assumed. If ringtails are detected during focused surveys or presence is assumed, Mitigation Measure BIO-2a will be implemented. ▶ If it is not feasible to avoid manual treatments, mechanical treatments, or prescribed burning activities during the bat maternity season (April 1 through August 31) pursuant to SPR BIO-1, then focused surveys for maternity roosts will be conducted prior to			

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
implementing treatment activities during the bat maternity season. If bat maternity roosts are detected during focused surveys, Mitigation Measure BIO-2b will be implemented.			
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 Program EIR. 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.	Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies (typically, up to 3 weeks before treatment). If an active nest is observed, implement avoidance strategies prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.			
Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements			
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance. **Project-Specific Implementation** To prevent herbicides from being mobilized and soil from being compacted which increases runoff and erosion risk, the project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if: (1) it is raining, (2) soils are saturated, and/or (3) soils are wet enough to mobilize herbicides or be compacted by mechanical or prescribed herbivory activities. The project proponent will be prepared to completely suspend mechanical and herbicide treatment activities prior to the initiation of the rain event. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer very wet or 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 very wet or saturated soil conditions may include, but are not limited to:	During mechanical and herbicide treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
(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, (5) inadequate traction without blading wet soil or surfacing materials, or (6) tire track imprints or hoof marks in the soil. This SPR applies only to mechanical 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.	During mechanical treatment activities.	US-LTRCD	US-LTRCD
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	During mechanical and prescribed burn activities that result in exposure of bare soil over 50 percent or more of the treatment area.	US-LTRCD	US-LTRCD
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.	Prior to and during treatment activities.	US-LTRCD	US-LTRCD
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 (2020 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.	During mechanical, manual, and prescribed burn treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	During mechanical, manual, and prescribed burn treatment activities.	US-LTRCD	US-LTRCD
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity. (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.	During all treatment activities.	US-LTRCD	US-LTRCD
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Prior to and during mechanical treatment activities on slopes greater than 50 percent.	US-LTRCD	US-LTRCD
Hazardous Material and Public Health and Safety Standard Project Requirements			
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to and during treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	During manual treatment activities.	US-LTRCD	US-LTRCD
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.	During manual treatment activities.	US-LTRCD	US-LTRCD
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.	During all treatment activities.	US-LTRCD	US-LTRCD
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; ▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; ▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Prior to and during herbicide treatment activities.	US-LTRCD	US-LTRCD
SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Prior to and during herbicide treatment activities.	US-LTRCD	US-LTRCD
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow	During herbicide treatment activities.	US-LTRCD	US-LTRCD

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contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.			
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: ▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▶ spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	During herbicide treatment activities.	US-LTRCD	US-LTRCD
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Post signs prior to the start of herbicide treatment activities and maintain the signs in place through at least 72 hours after treatment ceases.	US-LTRCD	US-LTRCD
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	During all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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. **Project-Specific Implementation** Vegetation treatment activities may result in discharges to waters of the state; therefore; compliance with Water Code sections 13260(a)(1) and 13264 are required. The project proponent will use the State Water Board's Vegetation Treatment General Order, which provides a mechanism for Water Code compliance for projects that prepare a CalVTP PSA or PSA/Addendum. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water Board's Vegetation Treatment General Order. The project's automatic enrollment satisfies the requirements of SPR HYD-1.			
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.	Prior to treatment activities.	US-LTRCD	US-LTRCD
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 (2020 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.	Establish WLPZs during design of treatment project; implement WLPZ protections during treatment	US-LTRCD	US-LTRCD

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths

Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.

Water Class	Class I	Class II	Class III	Class IV
	present onsite, includes habitat to sustain fish migration and spawning.	3) Excludes Class III waters that are tributary to Class I waters.	water flow conditions after completion of timber operations.	
WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ				
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.	
30-50 % Slope	100	75		
>50 % Slope	150	100		

Source: 14 CCR Section 916.5 [936.5, 956.5] (2020 version).

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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) (2020 version) and 14 CCR Section 916.5 (2020 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.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ 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. **Project-Specific Implementation** ▶ The project proponent will consult with CDFW, as requested during coordination pursuant to Mitigation Measure BIO-2a, to determine if notification is required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in the WLPZ. If consultation determines that notification is required, the 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.			
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.	During herbicide treatment.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. ▶ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. ▶ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. ▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative). ▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.			
SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to ground disturbing activities; after ground disturbing activities if required.	US-LTRCD	US-LTRCD
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.	During all treatment activities.	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD
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.	During all mechanical treatment activities.	US-LTRCD	US-LTRCD
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.	During all treatment activities.	US-LTRCD	US-LTRCD
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.	During all treatment activities.	US-LTRCD	US-LTRCD
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.	Prior to mechanical treatment activities occurring within 1,500 feet of noise-sensitive receptors.	US-LTRCD	US-LTRCD
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.	Prior to and during treatment	US-LTRCD	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	Prepare TMP prior to treatment and implement TMP during treatment activities.	US-LTRCD	US-LTRCD
Public Services and Utilities Standard Project Requirements			
SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Prior to and during mechanical and manual treatment activities.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Air Quality			
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: ▶ Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: ▪ meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; ▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ▪ contain no fatty acids or functionalized fatty acid esters; and ▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.	During all treatment activities.	US-LTRCD	US-LTRCD
Archaeological, Historical, and Tribal Cultural Resources			
Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource,	During ground-disturbing activities.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.			
Biological Resources			
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants. For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
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) other than Monterey are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: ▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape. ▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation. ▶ No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer. A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required. **Project-Specific Implementation** ▶ If special-status plant species, other than Monterey pine, are detected during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which treatments will not occur. A no-disturbance buffer is not required for Monterey pine because this species will benefit from treatments. ▶ If special-status plant species are detected during protocol-level surveys, an evaluation of the appropriate treatment design and frequency to maintain habitat function within habitat suitable for special-status plants will be carried out by a qualified RPF, biologist, or botanist. Therefore, habitat function for special-status plants would be maintained because treatment activities and maintenance treatments would be designed to ensure that treatments, including follow-up maintenance, maintain habitat function for the special-status plant species present. <u>Monterey Pine</u> The project proponent will avoid adverse effects to Monterey pine by implementing the following strategies which are applicable to prescribed burning: ▶ Monterey pine habitat will be broadcast burn within the natural fire return interval of 11 to 20 years. No maintenance prescribed burning will occur in these areas prior to a minimum of 11 years since the last burn.			
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. ▪ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c.	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
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. Maintain Habitat Function ▶ 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 of the lead agency 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. **Project-Specific Implementation** Applicable to the following species: ▪ California red-legged frog ▪ Bald eagle ▪ Mountain Lion ▪ Ringtail ▶ To avoid mortality, injury, or disturbance to California red-legged frog, if presence is assumed within the project area or protocol surveys detect California red-legged frog (pursuant to SPR BIO-10), the following will be implemented: ▪ Pretreatment surveys. • Each week, a pretreatment survey for California red-legged frog will be conducted within the following week's treatment areas that are located within 300 feet of a Class I or Class II water by a qualified biologist or RPF familiar with the California red-legged frog and its microhabitats to ensure frogs are not present.			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
• During the dispersal season (October 1 through April 1) or within 24 hours following a precipitation event greater than one quarter inch, surveys will be conducted outside of 300 feet from a Class I or Class II waters, the survey will be conducted by a qualified biologist, RPF, or biological technician. The qualified biologist, RPF, or biological technician will mark areas where frogs are found or likely to occur. • Prior to and within 24 hours ignition or mechanical treatment of burn piles, each pile will be inspected by a qualified biologist, RPF, or biological technician to determine that California red-legged frogs are not present prior to ignition or mechanical treatment. ▪ Biological Monitoring. Inspection of each day's treatment area will be performed by the qualified biologist, qualified RPF, or biological technician. Prior to implementation of daily inspections, the qualified biologist will conduct a training for other project staff (i.e., qualified RPF or biological technician). The training will include: identification of California red-legged frog, procedures to follow for daily inspection of appropriate habitat features immediately before treatment occurs, and proper procedures to implement if a frog is present (e.g., establish a no-disturbance buffer zone of a size that will appropriately avoid California red-legged frog where treatment will not occur until the frog has left the area, halt activities if a California red-legged frog is observed during treatment, allow California red-legged frogs to move out of the treatment area on their own accord, notify USFWS if California red-legged frogs are observed). ▪ If a California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, a no-disturbance buffer of 100 feet will be implemented around the individual unless it is determined by the qualified biologist that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal leaves on its own. ▪ All mechanized equipment including track chippers will shut down for 24 hours following any precipitation event of 0.2 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches. Handwork may continue. ▪ Manual treatments only will occur within 30 feet of the edge of Class III streams. In addition to the implementation of SPR HYD-4, which sets specific buffers for Class I and Class II streams, mechanical activities will be restricted to outside of a 30-foot buffer of all streams. ▪ No heavy equipment will be fueled within 65 feet of the edge of any watercourse. ▪ All herbicide use during project implementation will comply with the herbicide use restrictions in the stipulated injunction issued by the Federal District Court for the Northern District of California to resolve the 2006 case brought against the Environmental Protection Agency by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications will be allowed in California red-legged frog habitat under the following conditions: cut stump and basal bark applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat. ▪ If operators need to move or treat large woody debris greater than 12 inches in diameter, that piece of woody debris will be evaluated for CRLF by a qualified biologist, RPF, RPF supervised designee, or a contractor who has been through the environmental awareness training.			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▪ When treating live understory vegetation, if feasible, masticating heads will be kept out of the duff layer and will conduct treatments approximately 6 inches above the ground. ▪ If California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, the specific habitat features used by the frog when detected will be evaluated by a qualified RPF or biologist for habitat retention, and prioritized for use in meeting the retention standards for the project. ▪ If focused surveys detect bald eagle (pursuant to SPR BIO-10), to avoid mortality or injury to the species, the following will be implemented when treatment activities are implemented during the nesting season (February 1 to August 31). • A no-disturbance buffer of 0.5 mile will be placed around active bald eagle nests, and no treatment activities would occur within this buffer until the chicks have fledged, as determined by a qualified biologist or RPF. The distance of this buffer may be adjusted by a qualified RPF or biologist to account for topography, vegetation, or other screening that may reduce the effects of disturbance. ▪ To avoid mortality or injury to ringtail, if presence is assumed within the project area or focused surveys detect the species (pursuant to SPR BIO-10), the following will be implemented when mechanical treatments, manual treatments, or prescribed burning treatments are implemented during the maternity season (April 15–June 30). ▪ Within 7 days prior to the start of mechanical treatments, manual treatments, or prescribed burning treatments during the ringtail maternity season, a qualified RPF or biologist will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biologist will search for den structures, such as hollow logs, rock piles, and large trees and snags (i.e., greater than 12 inches dbh) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified biologist or RPF will inspect the cavity using a cell phone with a flash or other tools (e.g., borescopes) to determine whether ringtails are present, if safely accessible. Areas (e.g., large trees) with appropriate den habitat, verified as occupied or not, will be marked (i.e., with flagging, spray paint) for inspection during future sweeps (as described below) and for potential avoidance during the maternity season. The qualified RPF or biologist will also search for dens in dense brush habitat and will note any sightings of fleeing adult ringtails. ▪ If active ringtail dens are not discovered during a den survey, the following daily sweeps will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search, as well as to avoid injury or mortality of adult ringtails and kits. On the first morning of work for mechanical treatments, manual treatments, and prescribed burning treatments, a qualified RPF or biologist will conduct a sweep of the area to be treated that week and will search all habitat suitable for ringtails where mechanical treatments, manual treatments, or prescribed burning treatments will occur that day (i.e., larger logs, heavy brush, rock piles) for active dens or adults, including the locations previously marked by the qualified RPF or biologist if safely accessible. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens. ▪ If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and the requirements described below under "Active Dens" will be followed. Any potential den structures, where the biologist, RPF, or trained contractor is not able to determine if the structure is occupied or not, due to safety or access issues, will be retained until the end of the ringtail maternity season (June 30).			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▪ Active Dens. If active ringtail dens are discovered during a den survey or daily sweep, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and manual treatments, mechanical treatments and prescribed burning treatments will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer would incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer.			
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following. 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	Prior to and during all treatment activities.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. ▪ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods. <u>Maintain Habitat Function</u> ▶ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or 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			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
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. **Project-Specific Implementation** Applicable to the following species: ▪ Coast Range newt ▪ Two-striped gartersnake ▪ Western pond turtle ▪ Grasshopper sparrow ▪ Monarch butterfly ▪ Monterey dusky-footed woodrat ▪ Pallid bat ▪ Townsend's big-eared bat ▶ If Coast Range newts, two-striped gartersnakes, or western pond turtles are detected during focused visual encounter surveys or presence of the species is assumed (pursuant to SPR BIO-10), biological monitoring by a qualified biologist, RPF, or biological technician will be implemented during treatment activities within or adjacent to sensitive habitat areas (e.g., streams, seeps, springs, talus slopes) to avoid injury to or mortality of individuals. If the qualified biologist, RPF, or biological technician detects Coast Range newts, two-striped gartersnakes, or western pond turtles during treatments, treatment activities will cease until the individual has left the area or has been moved out of harm's way and to other nearby habitat suitable for the species by the qualified biologist, RPF, or biological technician with the appropriate permits. ▶ If a western pond turtle nest is detected within treatment areas during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of 50 feet including a path from the nest to the nearest aquatic habitat would be established around the nest. ▶ If grasshopper sparrow is detected within treatment areas during focused surveys pursuant to SPR BIO-10, then the following will be implemented when treatment activities are implemented during the nesting season (February 1 to August 31) to avoid mortality or injury to grasshopper sparrow. ▪ A no-disturbance buffer of 300 feet will be placed around active grasshopper sparrow nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF. ▶ If overwintering monarch butterflies are detected within treatment areas during focused surveys (pursuant to BIO-10), Prescribed burning, mechanical treatments, and manual treatments will not occur within the stand until the stand is no longer occupied as determined by a qualified RPF or biologist. Furthermore, for stands with documented use by overwintering monarch butterflies, a			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
treatment plan that results in no net loss of habitat for overwintering monarchs will be implemented as described in *Protecting California's Butterfly Groves: Management Guidelines for Monarch Butterfly Overwintering Habitat* (Xerces 2017), or equivalent guidance from a qualified biologist. The treatment plan will include stand mapping; disturbance avoidance measures, including buffers as determined by a qualified biologist or RPF; monitoring for microclimates within the stand; recommendations for tree trimming and removal; as well as the potential to include other measures such as the planting of fall and winter blooming flowers as applicable. ▶ To avoid mortality or injury to Monterey dusky-footed woodrat if focused surveys pursuant to SPR BIO-10 detect the species, the following will be implemented. ▪ Woodrat nests will be given a no-disturbance buffer of between 5 feet and 10 feet, where feasible. ▪ If Monterey dusky-footed woodrat nests within treatment areas cannot be avoided, broadcast burning will occur outside of the woodrat breeding season (breeding season is April through mid-July), when feasible. ▶ If the bat maternity roosting season cannot be avoided (pursuant to SPR BIO-1) and a special-status bat roost is detected during focused surveys (pursuant to BIO-10), a no-disturbance buffer of 250 feet will be established around the roost, and no treatment activities will occur within this buffer until the roost is no longer being used as determined by a qualified RPF or biologist. The distance of this buffer may be adjusted by a qualified RPF or biologist to account for topography, vegetation, or other screening that may reduce the effects of disturbance.			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible: ▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. ▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). ▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September). **CESA and ESA Listed Species.** A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. **Other Special-status Species.** A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be	During all treatment activities (if Crotch bumble bee is identified during surveys or assumed to be present).	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required. **Project-Specific Implementation** Mitigation Measure BIO-2g is applicable to Crotch bumble bee.			
Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: ▶ Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. ▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1. ▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). ▶ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break). ▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/).	During treatment activities in areas that contain sensitive natural communities.	US-LTRCD	US-LTRCD

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

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ 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 2021 ~~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. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. ▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Within this buffer, herbicide application is prohibited. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging. ▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained. ▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ▪ Fire containment lines and pile burning are prohibited within the buffer No fire ignition (and associated use of accelerants) will occur within the wetland buffer			
Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: ▶ **Retain Known Nursery Sites**. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment. **Establish Avoidance Buffers.** The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be	During treatment activities in areas that contain nursery sites (if nursery sites are identified during surveys).	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.			
Greenhouse Gas Emissions			
Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the *National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire* (NWCG 2020~~2018~~): ▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▶ reduce the total area burned through mosaic burning; ▶ burn when fuels have a higher fuel moisture content; ▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ▶ schedule burns before new fuels appear. As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.	Prior to and during prescribed burning treatments.	US-LTRCD	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Hazardous Materials, Public Health and Safety			
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.	During PSA preparation **Database searches are complete; see PSA/Addendum for results.**	PSA preparers	US-LTRCD

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Attachment B2

Mitigation Monitoring and Reporting Program for the Cambria Reserves Restoration and Vegetation Treatment Project – Cambria Pines Ecological Reserve

Cambria Reserves Restoration and Vegetation Treatment Project -
Cambria Pines Ecological Reserve

Mitigation Monitoring and Reporting Program

CalVTP Project ID: 2022-36

Prepared for:

April 2023

Mitigation Monitoring and Reporting Program for the

Cambria Reserves Restoration and Vegetation Treatment Project—Cambria Pines Ecological Reserve

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MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project because the Project Specific Analysis (PSA) identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. Standard project requirements (SPR), which are part of the project description, have been incorporated to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. While only mitigation measures are required to be covered in an MMRP, both SPRs and mitigation are included in this MMRP to assist in implementation of all environmental protection features of later activities consistent with the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (Program EIR).

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to facilitate the implementation of SPRs and mitigation measures. The Cambria Reserves Restoration and Vegetation Treatment Project (project) consists of vegetation treatments on up to 291 acres of land within two separate reserves. The California Department of Fish and Wildlife (CDFW) is proposing to implement vegetation treatments on up to 104 acres of land within CDFW's Cambria Pines Ecological Reserve (CPER). The Upper Salinas-Las Tablas Resource Conservation District (US-LTRCD) is proposing to implement vegetation treatment on up to 187 acres of land within the University of California Natural Reserve System's Kenneth S. Norris Rancho Marino Reserve (RMR). Two MMRPs have been prepared to help facilitate the implementation of SPRs and mitigation measures for each reserve; the measures in this MMRP are only applicable to the vegetation treatments on CPER.

The attached table presents the text of each SPR and mitigation measure from the CalVTP Program EIR that is applicable to the portion of the project on CPER, the timing of its planned implementation, the implementing entity, and the entity with monitoring responsibility. The numbering of SPRs and mitigation measures follows the numbering used in the Program EIR. SPRs and mitigation measures that are referenced more than once in the PSA are not duplicated in the MMRP. Instructions for project-specific implementation of certain SPRs and mitigation measures have been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, and the conditions and resources present within each treatment site. In addition, non-substantive clarifying edits to mitigation measures in the Program EIR are shown in underline and strikethrough. In all cases, the additional project-specific implementation instruction and clarifying edits to mitigation measures maintain the SPRs and mitigation measures as equivalent or more effective than those presented in the Program EIR.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, CDFW is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. CDFW will be responsible for implementation of mitigation measures pursuant to Section 15097 of the State CEQA Guidelines.

As defined in the CalVTP Program EIR and the PSA, the project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. Although CDFW is referred to as "project partner" in the PSA, it is referred to as the "project proponent" in this MMRP, reflecting its role in the implementation of SPRs and mitigation measures for CPER. In addition, US-LTRCD shall require that

CalVTP-related activities are consistent with the Public Works Plan (PWP) and with the terms and conditions of Notice of Impending Development (NOID) authorizations issued pursuant to the PWP. The US-LTRCD shall be responsible for CalVTP-related activities being undertaken under the provisions of the PWP or NOID authorizations and shall coordinate monitoring and reporting with CDFW as the implementing project partner. Monitoring and reporting shall be in accordance with the requirements (i.e., SPRs and mitigation measures) of this MMRP.

REPORTING

CDFW shall document and describe the compliance of the project treatment work with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

Pursuant to the US-LTRCD certified PWP, US-LTRCD shall provide monitoring reports in accordance with the requirements of the SPRs and mitigation measures in the MMRP (below) following implementation of the project. US-LTRCD shall maintain a record of monitoring reports in their office, which shall be made available for public review. US-LTRCD shall submit a copy of each monitoring report for the review and written approval of the Executive Director of the Coastal Commission within ten days of its completion. The monitoring reports shall be substantially consistent with the requirements of SPR AD-7 (and any other reporting required under the CalVTP) and shall be submitted after each completed phase of development (as such phases are described in the NOID). The monitoring reports shall describe compliance with PWP protection measures, progress of treatment activities (including initial and maintenance treatments), lessons learned, post-treatment evaluations for adaptive management purposes (including through photos documenting treatment areas before and after treatment), and an assessment of any changes in conditions that may affect project consistency with the PWP. The monitoring reports required by the Coastal Commission pursuant to the PWP also provide opportunity to consider the need for adaptive management and an assessment of any changes in conditions that may affect project consistency with the PWP. CDFW shall submit the required information that US-LTRCD needs to maintain oversight and provide needed monitoring reports to the Coastal Commission.

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP table are described below.

- **SPRs and Mitigation Measures** – This column provides the text of the applicable SPR or adopted mitigation measure.
- **Timing** – This column identifies the time frame in which the SPR or mitigation measure will be implemented.
- **Implementing Entity** – This column identifies the party responsible for implementing the SPR or mitigation measure.
- **Verifying/Monitoring Entity** – This column identifies the party responsible for verifying and monitoring implementation of the SPR or mitigation measure.

QUALIFICATION REQUIREMENTS FOR BIOLOGICAL AND CULTURAL RESOURCE MEASURES

The biological and cultural resource SPRs and mitigation measures in the attached MMRP table require that qualified individuals implement components of the measures. The CalVTP Program EIR requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including biologist, botanist, ecologist, Registered Professional Forester (RPF), biological technician, or supervised designees working at the direction of a qualified professional) as long as they are qualified for the task at hand.

Archaeologically Trained Resource Professional: To be qualified, an archaeologically-trained resource professional would hold a valid Archaeological Training Certificate issued by CAL FIRE and the Board of Forestry and Fire Protection or equivalent state or local agency training or certification. Work performed by an archaeologically-trained resource professional must be reviewed and approved by a qualified archaeologist.

Qualified Archaeologist: To be qualified, an archaeologist would hold a Prehistoric Archeology, Historic Archeology, Conservation, Cultural Anthropology, or Curation degree from an accredited university and meet the Secretary of Interior's Qualifications Standards (36 CFR Part 61). The project proponent will review the resume and approve the qualifications of the archaeologists.

Qualified RPF or Biological Technician: To be qualified, an RPF or biological technician would 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting biological monitoring of relevant species or resources, and 4) be knowledgeable about state and federal laws regarding the protection of special-status species. The project proponent will review the resume and approve the qualifications of RPFs or biological technicians.

Qualified RPF or Biologist: To be qualified, an RPF or biologist would hold a wildlife biology, botany, ecology, forestry, or other relevant degree from an accredited university and: 1) be knowledgeable in relevant species life histories and ecology, 2) be able to correctly identify relevant species and habitats, 3) have experience conducting field surveys of relevant species or resources, 4) be knowledgeable about survey protocols, 5) be knowledgeable about state and federal laws regarding the protection of special-status species, and 6) have experience with CDFW's California Natural Diversity Database (CNDDB) and Biogeographic Information and Observation System (BIOS). The project proponent will review the resume and approve the qualifications of RPFs or biologists. If species-specific protocol surveys are performed, surveys would be conducted by qualified RPFs or biologists with the minimum qualifications required by the appropriate protocols, including having CDFW or US Fish and Wildlife Service (USFWS)approval to conduct such surveys, if required by certain protocols.

Qualified RPF or Botanist: To be qualified, an RPF or botanist would 1) be knowledgeable about plant taxonomy, 2) be familiar with plants of the region, including special-status plants and sensitive natural communities, 3) have experience conducting floristic botanical field surveys as described in CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018), or experience conducting such botanical field surveys under the direction of an experienced botanical field surveyor, 4) be familiar with the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/), and 5) be familiar with federal, state, and local statutes and regulations related to plants and plant collecting. The project proponent will review the resume and approve the qualifications of RPFs or botanists.

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
Administrative Standard Project Requirements			
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment activities.	CDFW	US-LTRCD
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.	Prior to treatment activities.	CDFW	US-LTRCD
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.	Prior to and during all treatment activities.	CDFW	US-LTRCD
SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	At least three days prior to the commencement of prescribed burning operations.	CDFW	US-LTRCD
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.	During treatment activities.	CDFW	US-LTRCD
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	One to three days prior to the commencement of a treatment activity.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP Program EIR for CEQA compliance, the project proponent will provide the information listed below to the Board of Forestry and Fire Protection (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), or project latitude/longitude; ▶ 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 (following initial treatment): ▶ 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.	During the proposed, approved, and completed stages of the project. **Information on the proposed project (PSA in progress) was submitted to the Board on December 19, 2022.**	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Prior to all treatment activities. **Coastal Act Compliance for this project is achieved through Coastal Commission approval of the PSA and Coastal VTS.**	CDFW	US-LTRCD
Aesthetic and Visual Resource Standard Project Requirements			
SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	During mechanical and manual treatment activities.	CDFW	US-LTRCD
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.	During all treatment activities.	CDFW	US-LTRCD
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 all treatment types, including treatment maintenance.	During all treatment activities.	CDFW	US-LTRCD
Air Quality Standard Project Requirements			
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During all treatment activities.	CDFW	US-LTRCD
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air	Prior to prescribed burn	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	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. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Prior to prescribed burn treatment activities; does not apply to pile burning.	CDFW	US-LTRCD
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.	During all treatment activities.	CDFW	US-LTRCD
SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during	During prescribed burn treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.			
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if records search remains valid. **A complete record search of the 291-acre project area has been conducted; see PSA for a summary of results. Compliance with this SPR is complete.**	CDFW	US-LTRCD
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if records search remains valid. **Outreach to the NAHC has occurred, Tribes have been**	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	contacted and a SLF query has been completed; see PSA for a summary of consultation and Sacred Lands File query results.		
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if research remains valid.	CDFW	US-LTRCD
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.	Prior to all initial treatment activities. Not required prior to maintenance treatments if initial surveys remain valid.	CDFW	US-LTRCD
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.	Prior to and during all treatment activities.	CDFW	CDFW/ US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	Prior to and during all treatment activities.	CDFW	US-LTRCD
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.	Prior to and during all treatment activities.	CDFW	US-LTRCD
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.	Prior to and during all treatment activities.	CDFW	US-LTRCD
Biological Resources Standard Project Requirements			
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this Program EIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior	Prior to treatment activities. **Initial data review and reconnaissance -level survey have been conducted; see PSA for summary of results.**	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist. **Project-Specific Implementation** <u>Special-Status Wildlife</u> ▶ To avoid impacts on special-status nesting birds, mechanical treatments, manual treatments, herbicide application, and prescribed burning would not be implemented from February 1 to August 31, if feasible. If conducting some treatments outside of the nesting bird season is determined to be infeasible, then SPR BIO-10 will be implemented. ▶ To avoid impacts on overwintering monarch butterflies, treatments within tree stands suitable for overwintering monarchs will be conducted outside of the overwintering season (September through March). If it is not feasible to avoid certain treatments during the monarch overwintering season, SPR BIO-10 will be implemented. ▶ To avoid impacts on ringtail, manual treatment, mechanical treatments, and prescribed burning activities would not be implemented during the sensitive season (from April 15 to June 30), if feasible. If conducting manual large snag/tree removal, mechanical treatments, and prescribed burning treatments outside of the ringtail maternity season is determined to be infeasible for certain treatments, then SPR BIO-10 will be implemented. ▶ To avoid impacts on special-status bat maternity colonies, mechanical treatments, manual treatments, and prescribed burning would not be implemented during the sensitive season (from April 1 to August 31), if feasible. If it is infeasible to conduct mechanical treatments, manual treatments, and prescribed burning outside the sensitive season, SPR BIO-10 will be implemented. 2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW	Prior to and during treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** <u>Special-Status Wildlife</u> ▶ Because there is no reliable season during which all impacts on California red-legged frog, Coast Range newt, western pond turtle, Crotch bumble bee, Monterey dusky-footed woodrat, or mountain lion could be avoided and avoidance of habitat is not feasible for these species, implementation of SPR BIO-10 would be required for these species.			
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.	Prior to treatment activities.	CDFW	US-LTRCD
Sensitive Natural Communities and Other Sensitive Habitats			
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will: ▶ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). ▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to all treatment activities.	CDFW	US-LTRCD
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., ~~lone chaparral, blue~~ <u>Monterey pine forest and woodland, coast</u> oak woodland), the project	Prior to and during all	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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 *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	treatment activities.		
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this Program EIR, surveys will not be required under the following circumstances: ▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to all treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
Project-Specific Implementation ▶ For special-status plants not listed under ESA or CESA, if the limited operating period for annual and perennial geophyte species (i.e., non-ground-disturbing treatment activities conducted during the dormant season) is determined to be infeasible, then protocol-level surveys for these species will be conducted prior to implementation of treatments. ▶ Protocol-level surveys are not required for initial treatments prior to implementation of treatment activities because floristic surveys, in which every plant species encountered was identified to the level necessary to determine species status, have been conducted over multiple years at CPER, including during 2022, and the only special-status plants found have been La Cruz manzanita, Santa Lucia bush-mallow, and Monterey pine. The locations of these special-status plants in the treatment area have been mapped. In addition, Monterey pine is known to occur and would be subject to removal in order to benefit its habitat as described in Impact BIO-1 of the PSA.			
Environmentally Sensitive Habitat Areas			
SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this Program EIR, 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.	Prior to and during all treatment activities.	CDFW	US-LTRCD
Invasive Plants and Wildlife			
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;	Prior to and during all treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ 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.			
Wildlife			
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	No more than 14 days prior to all treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
Project-Specific Implementation Applicable to the following species: ▪ California red-legged frog ▪ Coast Range newt ▪ Western pond turtle ▪ Grasshopper sparrow ▪ Crotch bumble bee ▪ Monarch butterfly ▪ Monterey dusky-footed woodrat ▪ Ringtail ▪ Pallid bat ▪ Townsend's big-eared bat ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible for treatment activities that occur in habitat suitable for California red-legged frog, protocol surveys will be conducted by a qualified biologist or RPF following the guidelines provided by US Fish and Wildlife Service (USFWS 2005), or presence of the species will be assumed. If presence is assumed or the species is detected during protocol surveys, Mitigation Measure BIO-2a will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, focused surveys for Coast Range newts will be conducted by a qualified biologist or RPF within habitat suitable for the species prior to implementation of mechanical, manual, herbicide application, and prescribed burning treatments, or presence of the species will be assumed. If Coast Range newts are identified during focused surveys or assumed to be present, Mitigation Measure BIO-2b will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, to avoid impacts on western pond turtle, focused surveys for individuals and nests will be conducted prior to treatment activities that occur in habitat suitable for western pond turtle, or presence of the species will be assumed. If western pond turtles are detected during focused surveys or assumed to be present, Mitigation Measure BIO-2b will be implemented. ▶ If it is not feasible to avoid certain treatments during the nesting bird season (February 1 through August 31) pursuant to SPR BIO-1, then focused surveys (i.e., nest searches) for grasshopper sparrow nests will be conducted prior to implementing treatment activities during the nesting bird season. If nesting grasshopper sparrows are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, to avoid impacts on Crotch bumble bee, surveys will be conducted by a qualified biologist or RPF within habitat suitable for Crotch bumble bee prior to implementation of mechanical, manual, herbicide application, and prescribed burning treatments within habitat suitable for Crotch bumble bee, or presence of this species in suitable habitat will be assumed and Mitigation Measure BIO-2g will apply.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ If it is not feasible to avoid mechanical, manual, and prescribed burning treatments during the monarch overwintering season (September through March), pursuant to SPR BIO-1, the following will be implemented to avoid impacts to special-status overwintering monarch butterflies: ▪ A qualified RPF or biologist will assess the project area for stands suitable for overwintering monarch butterflies. and overwintering activity. ▪ If overwintering stands suitable for monarch are present within the project area, these stands will be recorded and surveyed for overwintering monarchs prior to treatment activities occurring in those stands during the overwintering season. ▪ If overwintering monarchs are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, to avoid impacts on Monterey dusky-footed woodrat, focused surveys for middens will be conducted prior to treatment activities that occur in habitat suitable for Monterey dusky-footed woodrat. If Monterey dusky-footed woodrat middens are detected during focused surveys, Mitigation Measure BIO-2b will be implemented. ▶ Because avoidance of habitat pursuant to SPR BIO-1 is not feasible, for treatment activities that occur in habitat suitable for foraging mountain lions, presence of the species will be assumed and Mitigation Measure BIO-2a will be implemented. ▶ If it is not feasible to avoid manual treatments, mechanical treatments, or prescribed burning activities during the ringtail maternity season (pursuant to SPR BIO-1), focused surveys for ringtail will be conducted using trail cameras, track plates, and other non-invasive survey methods to determine whether ringtails are present within the treatment area. Surveys will be conducted by a qualified RPF or biologist with a valid CDFW Scientific Collecting Permit, or presence may be assumed. If ringtails are detected during focused surveys or presence is assumed, Mitigation Measure BIO-2a will be implemented. ▶ If it is not feasible to avoid manual treatments, mechanical treatments, or prescribed burning activities during the bat maternity season (April 1 through August 31) pursuant to SPR BIO-1, then focused surveys for maternity roosts will be conducted prior to implementing treatment activities during the bat maternity season. If bat maternity roosts are detected during focused surveys, Mitigation Measure BIO-2b will be implemented.			
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 Program EIR. 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 identify 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	Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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	avoidance strategies (typically, up to 3 weeks before treatment). If an active nest is observed, implement avoidance strategies prior to and during all treatment activities.		

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.			
Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements			
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance. **Project-Specific Implementation** To prevent herbicides from being mobilized and soil from being compacted which increases runoff and erosion risk, the project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if: (1) it is raining, (2) soils are saturated, and/or (3) soils are wet enough to mobilize herbicides or be compacted by mechanical or prescribed herbivory activities. The project proponent will be prepared to completely suspend mechanical and herbicide treatment activities prior to the initiation of the rain event. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer very wet or 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 very wet or 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, (5) inadequate traction without blading wet soil or surfacing materials, or (6) tire track imprints or hoof marks in the soil. This SPR applies only to mechanical and herbicide treatment activities and all treatment types, including treatment maintenance.	During mechanical and herbicide treatment activities.	CDFW	US-LTRCD
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.	During mechanical treatment activities.	CDFW	US-LTRCD
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	During mechanical and prescribed burn	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	activities that result in exposure of bare soil over 50 percent or more of the treatment area.		
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.	Prior to and during treatment activities.	CDFW	US-LTRCD
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 (2020 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.	During mechanical, manual, and prescribed burn treatment activities.	CDFW	US-LTRCD
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	During mechanical, manual, and prescribed burn treatment activities.	CDFW	US-LTRCD
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to:	During all treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
(i) Existing tractor roads that do not require reconstruction, or (ii) 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.			
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Prior to and during mechanical treatment activities on slopes greater than 50 percent.	CDFW	US-LTRCD
Hazardous Material and Public Health and Safety Standard Project Requirements			
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to and during treatment activities.	CDFW	US-LTRCD
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.	During manual treatment activities.	CDFW	US-LTRCD
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.	During manual treatment activities.	CDFW	US-LTRCD
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.	During all treatment activities.	CDFW	US-LTRCD
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;	Prior to and during herbicide treatment activities.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; ▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.			
SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Prior to and during herbicide treatment activities.	CDFW	US-LTRCD
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	During herbicide treatment activities.	CDFW	US-LTRCD
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: ▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▶ spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	During herbicide treatment activities.	CDFW	US-LTRCD
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word	Post signs prior to the start of herbicide	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
(i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	treatment activities and maintain the signs in place through at least 72 hours after treatment ceases.		
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. **Project-Specific Implementation** Vegetation treatment activities may result in discharges to waters of the state; therefore; compliance with Water Code sections 13260(a)(1) and 13264 are required. The project proponent will use the State Water Board's Vegetation Treatment General Order, which provides a mechanism for Water Code compliance for projects that prepare a CalVTP PSA or PSA/Addendum. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water Board's Vegetation Treatment General Order. The project's automatic enrollment satisfies the requirements of SPR HYD-1.	During all treatment activities.	CDFW	US-LTRCD
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.	Prior to treatment activities.	CDFW	US-LTRCD
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 (2020 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.	Establish WLPZs during design of treatment project;	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
	implement WLPZ protections during treatment		

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths

Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.
WLPZ Width (ft) –	Distance from	top of bank to	the edge of	WLPZ
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.	

Water Class	Class I	Class II	Class III	Class IV
30-50 % Slope	100	75		
>50 % Slope	150	100		

Source: 14 CCR Section 916.5 [936.5, 956.5] (2020 version).

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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) (2020 version) and 14 CCR Section 916.5 (2020 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.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicides: ▶ Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. ▶ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. ▶ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. ▶ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. ▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative). ▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.	During herbicide treatment.	CDFW	US-LTRCD
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.	Prior to ground disturbing activities; after ground disturbing activities if required.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	During all treatment activities.	CDFW	US-LTRCD
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Prior to and during all treatment activities.	CDFW	US-LTRCD
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.	During all mechanical treatment activities.	CDFW	US-LTRCD
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.	During all treatment activities.	CDFW	US-LTRCD
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.	During all treatment activities.	CDFW	US-LTRCD
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.	Prior to mechanical treatment activities occurring within 1,500 feet of noise-sensitive receptors.	CDFW	US-LTRCD

Standard Project Requirements	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.	Prior to and during treatment	CDFW	US-LTRCD
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.	Prepare TMP prior to treatment and implement TMP during treatment activities.	CDFW	US-LTRCD
Public Services and Utilities Standard Project Requirements			
SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Prior to and during mechanical and manual treatment activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Air Quality			
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: ▶ Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: ▪ meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; ▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ▪ contain no fatty acids or functionalized fatty acid esters; and ▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.	During all treatment activities.	CDFW	US-LTRCD
Archaeological, Historical, and Tribal Cultural Resources			
Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural	During ground-disturbing activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.			
Biological Resources			
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants. For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.	Prior to and during all treatment activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: ▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape. ▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation. ▶ No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer. A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.	Prior to and during all treatment activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required. **Project-Specific Implementation** ▶ If special-status plant species are detected during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which treatments will not occur (exceptions to this buffer are described below for La Cruz manzanita, Monterey pine, and Santa Lucia bush-mallow). ▶ If special-status plant species are detected during protocol-level surveys, an evaluation of the appropriate treatment design and frequency to maintain habitat function within habitat suitable for special-status plants will be carried out by a qualified RPF, biologist, or botanist. Therefore, habitat function for special-status plants would be maintained because treatment activities and maintenance treatments would be designed to ensure that treatments, including follow-up maintenance, maintain habitat function for the special-status plant species present. <u>La Cruz Manzanita</u> The project proponent will avoid adverse effects to La Cruz manzanita by implementing the following strategies which are applicable to manual treatment and prescribed burning: ▶ The minimum 50-foot no-disturbance buffer around La Cruz manzanita shall be reduced only for manual treatments that will remove or thin trees and tree limbs that are encroaching on or in La Cruz manzanita plants. ▶ No prescribed broadcast burns will occur within approximately 5 feet of La Cruz manzanita plants in Monterey pine habitat that contains known La Cruz manzanita shrubs. The final buffer size would be determined by a qualified biologist or RPF based on site-specific conditions (e.g., fuel loading around the La Cruz manzanita). No pile burning will occur within 50 feet of La Cruz manzanita plants. <u>Monterey Pine</u> The project proponent will avoid adverse effects to Monterey pine by implementing the following strategies which are applicable to prescribed burning: ▶ Monterey pine habitat will be broadcast burn within the natural fire return interval of 11 to 20 years. No maintenance prescribed burning will occur in these areas prior to a minimum of 11 years since the last burn. <u>Santa Lucia Bush-Mallow</u> The project proponent will avoid adverse effects to Santa Lucia bush-mallow by implementing the following strategies which are applicable to manual treatment and prescribed burning:			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ The minimum 50-foot no-disturbance buffer around Santa Lucia bush-mallow shall be reduced only for manual treatments adjacent to individual Santa Lucia bush-mallow shrubs to remove other plant species (including Monterey pine saplings and poles) that are shading this species. ▶ No prescribed broadcast burns will occur within approximately 5 feet of Santa Lucia bush-mallow. The final buffer size would be determined by a qualified biologist or RPF based on site-specific conditions (e.g., fuel loading around the Santa Lucia bush-mallow). No pile burning will occur within 50 feet of Santa Lucia bush-mallow plants.			
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. ▶ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c. Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided. <u>Maintain Habitat Function</u> ▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following: ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, 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.	Prior to and during all treatment activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▪ 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 of the lead agency 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. **Project-Specific Implementation** Applicable to the following species: ▪ California red-legged frog ▪ Mountain lion ▪ Ringtail ▶ To avoid mortality, injury, or disturbance to California red-legged frog, if presence is assumed within the project area or protocol surveys detect California red-legged frog (pursuant to SPR BIO-10), the following will be implemented: ▪ If a California red-legged frog is found during treatment activities, a no-disturbance buffer of 100 feet will be implemented around the individual unless it is determined by the qualified biologist or RPF that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal leaves on its own. ▪ All mechanized equipment including track chippers will shut down for 24 hours following any precipitation event of 0.2 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches. Handwork may continue. ▪ Manual treatments only will occur within 30 feet of Class III streams. In addition to the implementation of SPR HYD-4, which sets specific buffers for Class I and Class II streams, mechanical activities will be restricted to outside of a 30-foot buffer of all streams. ▪ No heavy equipment will be fueled within 65 feet of any watercourse. ▪ All herbicide use during project implementation will comply with the herbicide use restrictions in the stipulated injunction issued by the Federal District Court for the Northern District of California to resolve the 2006 case brought against the Environmental Protection Agency by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications will be allowed in California red-legged frog habitat under the following conditions: cut stump and basal bark applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat. ▶ To avoid mortality or injury to ringtail, if presence is assumed within the project area or focused surveys detect the species (pursuant to SPR BIO-10) the following will be implemented when mechanical treatments, manual treatments, or prescribed burning treatments are implemented during the maternity season (April 15–June 30).			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▪ Within 7 days prior to the start of mechanical treatments, manual treatments, or prescribed burning treatments during the ringtail maternity season, a qualified RPF or biologist will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biologist will search for den structures, such as hollow logs, rock piles, and large trees and snags (i.e., greater than 12 inches dbh) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified biologist or RPF will inspect the cavity using a cell phone with a flash or other tools (e.g., borescopes) to determine whether ringtails are present, if safely accessible. Areas (e.g., large trees) with appropriate den habitat, verified as occupied or not, will be marked (i.e., with flagging, spray paint) for inspection during future sweeps (as described below) and for potential avoidance during the maternity season. The qualified RPF or biologist will also search for dens in dense brush habitat and will note any sightings of fleeing adult ringtails. ▪ If active ringtail dens are not discovered during a den survey, the following daily sweeps will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search, as well as to avoid injury or mortality of adult ringtails and kits. On the first morning of work for mechanical treatments, manual treatments, and prescribed burning treatments, a qualified RPF or biologist will conduct a sweep of the area to be treated that week and will search all habitat suitable for ringtails where mechanical treatments, manual treatments, or prescribed burning treatments will occur that day (i.e., larger logs, heavy brush, rock piles) for active dens or adults, including the locations previously marked by the qualified RPF or biologist if safely accessible. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens. • If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and the requirements described below under "Active Dens" will be followed. Any potential den structures, where the biologist, RPF, or trained contractor is not able to determine if the structure is occupied or not, due to safety or access issues, will be retained until the end of the ringtail maternity season (June 30). ▪ Active Dens. If active ringtail dens are discovered during a den survey or daily sweep, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and mechanical treatments, manual treatments, and prescribed burning treatments will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer would incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer.			
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following. Avoid Mortality, Injury, or Disturbance of Individuals ▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:	Prior to and during all treatment activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ 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. <u>Maintain Habitat Function</u> ▶ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or 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			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
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. **Project-Specific Implementation** Applicable to the following species: ▪ Coast Range newt ▪ Western pond turtle ▪ Grasshopper sparrow ▪ Monarch butterfly ▪ Monterey dusky-footed woodrat ▪ Pallid bat ▪ Townsend's big-eared bat ▶ If Coast Range newts or western pond turtles are detected during focused visual encounter surveys or presence is assumed (pursuant to SPR BIO-10), biological monitoring by a qualified biologist, RPF, or trained designee will be implemented during treatment activities within or adjacent to sensitive habitat areas (e.g., streams, seeps, springs) to avoid injury to or mortality of individuals. If the qualified			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
biologist, RPR, or trained designee detects Coast Range newts or western pond turtles during treatments, treatment activities will cease until the individual has left the area or has been moved out of harm's way and to other nearby habitat suitable for the species by the qualified biologist, RPF, or trained designee with the appropriate permits. ▶ If a western pond turtle nest is detected within treatment areas during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of 50 feet including a path from the nest to the nearest aquatic habitat would be established around the nest. ▶ If grasshopper sparrow is detected within treatment areas during focused surveys pursuant to SPR BIO-10, then the following will be implemented when treatment activities are implemented during the nesting season (February 1 to August 31) to avoid mortality or injury to grasshopper sparrow. ▪ A no-disturbance buffer of 300 feet will be placed around active grasshopper sparrow nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF. ▶ If overwintering monarch butterflies are detected within treatment areas during focused surveys (pursuant to BIO-10), Prescribed burning, mechanical treatments, and manual treatments will not occur within the stand until the stand is no longer occupied as determined by a qualified RPF or biologist. Furthermore, for stands with documented use by overwintering monarch butterflies, a treatment plan that results in no net loss of habitat for overwintering monarchs will be implemented as described in *Protecting California's Butterfly Groves: Management Guidelines for Monarch Butterfly Overwintering Habitat* (Xerces 2017), or equivalent guidance from a qualified biologist. The treatment plan will include stand mapping; disturbance avoidance measures, including buffers as determined by a qualified biologist or RPF; monitoring for microclimates within the stand; recommendations for tree trimming and removal; as well as the potential to include other measures such as the planting of fall and winter blooming flowers as applicable. ▶ To avoid mortality or injury to Monterey dusky-footed woodrat if focused surveys pursuant to SPR BIO-10 detect the species, the following will be implemented. ▪ Woodrat nests will be given a no-disturbance buffer of between 5 feet and 10 feet, where feasible. ▪ If Monterey dusky-footed woodrat nests within treatment areas cannot be avoided, broadcast burning will occur outside of the woodrat breeding season (breeding season is April through mid-July), when feasible. ▶ If the bat maternity roosting season cannot be avoided (pursuant to SPR BIO-1) and a special-status bat roost is detected during focused surveys (pursuant to BIO-10), a no-disturbance buffer of 250 feet will be established around the roost, and no treatment activities will occur within this buffer until the roost is no longer being used as determined by a qualified RPF or biologist. The distance of this buffer may be adjusted by a qualified RPF or biologist to account for topography, vegetation, or other screening that may reduce the effects of disturbance.			

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible: ▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. ▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). ▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September). **CESA and ESA Listed Species.** A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. **Other Special-status Species.** A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat	During all treatment activities (if Crotch bumble bee is identified during surveys or assumed to be present).	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required. **Project-Specific Implementation** Mitigation Measure BIO-2g is applicable to Crotch bumble bee.			
Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: ▶ Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. ▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1. ▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). ▶ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break). ▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/).	During treatment activities in areas that contain sensitive natural communities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory. The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.			
Mitigation Measure BIO-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 2021 ~~2019~~ or current procedures).	Prior to and during all treatment activities.	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. ▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Within this buffer, herbicide application is prohibited. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging. ▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained. ▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ▪ Fire containment lines and pile burning are prohibited within the buffer No fire ignition (and associated use of accelerants) will occur within the wetland buffer			
Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: ▶ **Retain Known Nursery Sites**. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment. ▶ **Establish Avoidance Buffers.** The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.	During treatment activities in areas that contain nursery sites (if nursery sites are identified during surveys).	CDFW	US-LTRCD

Mitigation Measures	Timing	Implementing Entity	Verifying/ Monitoring Entity
Greenhouse Gas Emissions			
Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the *National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire* (NWCG 2020): ▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▶ reduce the total area burned through mosaic burning; ▶ burn when fuels have a higher fuel moisture content; ▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ▶ schedule burns before new fuels appear. As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.	Prior to and during prescribed burning treatments.	CDFW	US-LTRCD
Hazardous Materials, Public Health and Safety			
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.	During PSA preparation **Database searches are complete; see PSA/Addendum for results.**	PSA preparers	US-LTRCD

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Attachment C

Biological Resources

Special-Status Plant Species Known to Occur in the Vicinity of the Treatment Areas and Their Potential for Occurrence in the Treatment Areas

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Bristlecone fir *Abies bracteata*	—	—	1B.3	Lower montane coniferous forest, broadleafed upland forest, chaparral, riparian woodland, old growth. Rocky sites in Monterey and San Luis Obispo counties. 591–5102 feet in elevation. Perennial.	CPER- Not expected to occur. Forest habitat in the project area is restricted to Monterey pine forest and bristlecone fir has not been found on the reserve. The project area is outside the elevational range of the species. RMR- Not expected to occur. Forest habitat in the project area is restricted to Monterey pine forest. The project area is outside the elevational range of the species.
Hickman's onion *Allium hickmanii*	—	—	1B.2	Mostly in grassland, although can be associated with chaparral, woodland, closed-cone coniferous forest, coastal scrub, and coastal prairie. Sandy loam, damp ground and vernal swales. 16–656 feet in elevation. Blooms March–May. Geophyte.	CPER- Not expected to occur. Grassland and swale habitats in closed-cone coniferous forest suitable for this species are present in the treatment area. However, ongoing botanical surveys within the reserve have not detected the species (Hacker, pers. comm., 2023). RMR- **May occur**. Closed-cone coniferous forest and grassland habitats suitable for this species are present in the project area.
La Cruz manzanita *Arctostaphylos cruzensis*	—	—	1B.2	Broadleafed upland forest, coastal bluff scrub, closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland. Sandy soils. 197–1017 feet in elevation. Blooms December–March. Perennial.	CPER- **Known to occur**. La Cruz manzanita occurs mainly in the northern portion of the project area. RMR- **May occur**. Monterey pine forest and grassland habitat suitable for this species are present in the project area.
Hearsts' manzanita *Arctostaphylos hookeri* ssp. *hearstiorum*	—	SE	1B.2	Ultramafic. Chaparral, coastal prairie, coastal scrub, valley foothill grassland. Terraces on sandy loam. Also known from stabilized dunes and from serpentine (in one case). 197–509 feet in elevation. Blooms February–April. Perennial.	CPER- Not expected to occur. Suitable serpentine soils are not present in the project area and this species appears to be restricted to the Arroyo de la Cruz area, located roughly 15 miles north of the project area along the coast. RMR- Not expected to occur. Suitable sandy or serpentine soils are not present in the project area and this species appears to be restricted to the Arroyo de la Cruz area, located roughly 15 miles north of the project area along the coast.
Santa Lucia manzanita *Arctostaphylos luciana*	—	—	1B.2	On shale (one observation in serpentine) outcrops, on slopes, in chaparral. 344–2608 feet in elevation. Blooms December–March. Perennial.	CPER- Not expected to occur. Suitable chaparral habitat is not present in the project area. RMR- Not expected to occur. Suitable chaparral habitat is not present in the project area.
Indian Valley spineflower *Aristocapsa insignis*	—	—	1B.2	Cismontane woodland. Sandy substrates. 591–3478 feet in elevation. Blooms May–September. Annual.	CPER- Not expected to occur. Suitable woodland habitat is not present in the project area. RMR- Not expected to occur. Suitable woodland habitat is not present in the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Miles' milk-vetch *Astragalus didymocarpus* var. *milesianus*	—	—	1B.2	Coastal scrub. Clay soils. 164–1263 feet in elevation. Blooms March–June. Annual.	CPER- Not expected to occur. Suitable coastal scrub habitat is not present in the project area. RMR- Not expected to occur. Suitable coastal scrub habitat is not present in the project area.
San Simeon baccharis *Baccharis plummerae* ssp. *glabrata*	—	—	1B.2	Coastal scrub. In open shrub-grassland associations. 295–1591 feet in elevation. Blooms June. Perennial.	CPER- Not expected to occur. Suitable coastal scrub habitat is not present in the project area. RMR- Not expected to occur. Suitable coastal scrub habitat is not present in the project area.
Dwarf goldenstar *Bloomeria humilis*	—	SR	1B.2	Coastal bluff scrub, chaparral, valley and foothill grassland. Known mainly from Arroyo de La Cruz area. 33–197 feet in elevation. Blooms June. Geophyte.	CPER- Not expected to occur. Grassland habitat suitable for this species is present in the treatment area. There is a 1991 collection attributed to the treatment area, but the location details describe the adjacent parcel (Calflora 2022). However, botanical surveys conducted over multiple years within the reserve have not detected the species (Hacker, pers. comm., 2023) RMR- **May occur**. Grassland habitat suitable for this species is present in the project area.
Late-flowered mariposa-lily *Calochortus fimbriatus*	—	—	1B.3	Ultramafic. Chaparral, cismontane woodland, riparian woodland. Dry, open areas on serpentine. 886–4708 feet in elevation. Blooms June–August. Geophyte.	CPER- Not expected to occur. Suitable habitat and ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable habitat and ultramafic soils are not present in the project area.
San Luis mariposa-lily *Calochortus obispoensis*	—	—	1B.2	Ultramafic. Chaparral, coastal scrub, valley and foothill grassland. Often in serpentine soils. 164–2395 feet in elevation. Blooms May–July. Geophyte.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
La Panza mariposa-lily *Calochortus simulans*	—	—	1B.3	Valley and foothill grassland, chaparral, cismontane woodland, lower montane coniferous forest. Decomposed granite or sometimes on serpentine. 164–3806 feet in elevation. Blooms April–June. Geophyte.	CPER- Not expected to occur. Suitable decomposed granite or serpentine microhabitat is not present in the project area and there are no documented occurrences of this species in the vicinity of the project area (CNDDB 2022; Calflora 2022). RMR- Not expected to occur. Suitable decomposed granite or serpentine microhabitat is not present in the project area and there are no documented occurrences of this species in the vicinity of the project area (CNDDB 2022; Calflora 2022).

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Dwarf calycadenia *Calycadenia villosa*	—	—	1B.1	Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps. Open, dry areas of hillsides and gravelly outwashes. 787–4429 feet in elevation. Blooms May–October. Annual.	CPER- Not expected to occur. The project area is outside of the elevational range of this species. RMR- Not expected to occur. The project area is outside of the elevational range of this species.
Hardham's evening-primrose *Camissoniopsis hardhamiae*	—	—	1B.2	Chaparral, cismontane woodland. Sandy, decomposed carbonate or limestone. 459–3100 feet in elevation. Blooms March–May. Annual.	CPER- Not expected to occur. Suitable chaparral and woodland habitat are not present in the project area. RMR- Not expected to occur. Suitable chaparral and woodland habitat are not present in the project area.
San Luis Obispo sedge *Carex obispoensis*	—	—	1B.2	Springs, seeps, or streambanks in closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, or valley and foothill grassland. Usually in transitional zones on serpentine or gabbro. 16–2772 feet in elevation. Blooms April–June. Perennial.	CPER- Not expected to occur. Se There are several documented occurrences in the project vicinity (CNDDB 2022a; Calflora 2022). However, there are no ultramafic soils present and botanical surveys within the reserve have not detected the species (Hacker, pers. comm., 2023). RMR- Not expected to occur. There are no ultramafic soils present in the project area. There are several documented occurrences in the project vicinity (CNDDB 2022; Calflora 2022).
San Luis Obispo owl's-clover *Castilleja densiflora* var. *obispoensis*	—	—	1B.2	Valley and foothill grassland, meadows and seeps. Sometimes on serpentine. 33–1591 feet in elevation. Blooms March–May. Annual.	CPER- Not expected to occur. Grassland habitat suitable for this species is present in the treatment area and there are several documented occurrences in the project vicinity (CNDDB 2022a; Calflora 2022). However, botanical surveys conducted over multiple years within the reserve have not detected the species (Hacker, pers. comm., 2023). RMR- **May occur**. Grassland habitat suitable for this species is present in the project area. There are several documented occurrences in the project vicinity (CNDDB 2022; Calflora 2022).
Hearsts' ceanothus *Ceanothus hearstiorum*	—	SR	1B.2	Maritime chaparral, coastal prairie, coastal scrub, or grassland. Sometimes with *Arctostaphylos cruzensis*. 230–1001 feet in elevation. Blooms March–April. Perennial.	CPER- Not expected to occur. Grassland habitat suitable for this species is present in the treatment area; however, Hacker, pers. comm., 2023)botanical surveys conducted over multiple years within the reserve have not detected the species (Hacker, pers. comm., 2023). RMR- **May occur**. Grassland habitat suitable for this species is present in the project area; however, this species has not been documented during previous plant surveys (Wahlert, pers. comm., 2022).

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Maritime ceanothus *Ceanothus maritimus*	—	SR	1B.2	Chaparral, often at edges of coastal sage scrub and scattered in valley and foothill grassland. Some populations on serpentine. 33–492 feet in elevation. Blooms January–April. Perennial.	CPER- Not expected to occur. Grassland habitat suitable for this species is present in the treatment area; however, this species has not been detected during botanical surveys, conducted over multiple years within the reserve (Hacker, pers. comm., 2023). RMR- **May occur**. Grassland habitat suitable for this species is present in the project area; however, this species has not been documented during previous plant surveys (Wahlert, pers. comm., 2022).
Monterey spineflower *Chorizanthe pungens* var. *pungens*	FT	—	1B.2	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils. 0–558 feet in elevation. Blooms April–June. Annual.	CPER- Not expected to occur. Although potentially suitable grassland habitat is present in the project area, this species is only known from San Luis Obispo County from an 1842 collection near San Simeon (CNDDB 2022; Calflora 2022) and this species has not been documented during previous plant surveys (Hacker, pers. comm., 2023). RMR- Not expected to occur. Although potentially suitable grassland habitat is present in the project area, this species is only known from San Luis Obispo County from an 1842 collection near San Simeon (CNDDB 2022; Calflora 2022) and this species has not been documented during previous plant surveys (Wahlert, pers. comm., 2022).
Chorro Creek bog thistle *Cirsium fontinale* var. *obispoense*	FE	SE	1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Seeps, serpentinite. 115-1265 feet in elevation. Blooms February-July. Perennial.	CPER- Not expected to occur. Suitable serpentine seep microhabitat is not present in the project area. RMR- Not expected to occur. Suitable serpentine seep microhabitat is not present in the project area.
Compact cobwebby thistle *Cirsium occidentale* var. *compactum*	—	—	1B.2	Chaparral, coastal dunes, coastal prairie, coastal scrub, and grasslands. Dunes or clay soils. 16–492 feet in elevation. Blooms April–June. Perennial.	CPER- Not expected to occur. Coastal prairie habitat suitable for this species is present in the treatment area. However, botanical surveys conducted over multiple years within the reserve have not detected the species (Hacker, pers. comm., 2023). RMR- **May occur**. Coastal prairie habitat suitable for this species is present in the project area. A different variety of this species, *Cirsium occidentale* var. *occidentale*, which is not rare, has been documented in RMR (Wahlert, pers. comm., 2022).

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Mendocino dodder *Cuscuta pacifica* var. *papillata*	—	—	1B.2	Coastal dunes. Interdune depressions. Annual parasitic vine observed on *Gnaphalium, Silene* and *Lupinus*. 0–164 feet in elevation. Blooms July–October. Annual.	CPER- Not expected to occur. Suitable coastal dune habitat is not present in the project area. RMR- Not expected to occur. Suitable coastal dune habitat is not present in the project area.
Dune larkspur *Delphinium parryi* ssp. *blochmaniae*	—	—	1B.2	Chaparral, coastal dunes (maritime), or rocky areas. 49–1230 feet in elevation. Blooms April–June. Perennial.	CPER- Not expected to occur. Suitable chaparral, dune, or rocky habitat is not present in the project area. RMR- Not expected to occur. Suitable chaparral, dune, or rocky habitat is not present in the project area.
Eastwood's larkspur *Delphinium parryi* ssp. *eastwoodiae*	—	—	1B.2	Ultramafic. Openings in chaparral or valley and foothill grassland. Serpentine. 197–2100 feet in elevation. Blooms March. Perennial.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
Umbrella larkspur *Delphinium umbraculorum*	—	—	1B.3	Cismontane woodland. Mesic sites. 1312–5249 feet in elevation. Blooms April–June. Perennial.	CPER- Not expected to occur. The project area is outside the known elevational range of this species. RMR- Not expected to occur. The project area is outside the known elevational range of this species.
Betty's dudleya *Dudleya abramsii* ssp. *bettinae*	—	—	1B.2	Ultramafic. Coastal scrub, valley and foothill grassland, chaparral. On rocky, barren exposures of serpentine within scrub vegetation. 66–820 feet in elevation. Blooms May–July. Perennial.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
Mouse-gray dudleya *Dudleya abramsii* ssp. *murina*	—	—	1B.3	Ultramafic. Chaparral, cismontane woodland, valley and foothill grassland. Serpentine outcrops. 82–1755 feet in elevation. Blooms May–June. Perennial.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
Blochman's dudleya *Dudleya blochmaniae* ssp. *blochmaniae*	—	—	1B.1	Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 16–1476 feet in elevation. Blooms April–June. Perennial.	CPER- Not expected to occur. Suitable serpentine soils are not present in the project area. RMR- Not expected to occur. Suitable serpentine soils are not present in the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Yellow-flowered eriastrum *Eriastrum luteum*	—	—	1B.2	On bare, sandy, decomposed granite slopes. 787–1903 feet in elevation. Blooms May–June. Annual.	CPER- Not expected to occur. The project area is outside the known elevational range of this species. RMR- Not expected to occur. The project area is outside the known elevational range of this species.
Hoover's button-celery *Eryngium aristulatum* var. *hooveri*	—	—	1B.1	Vernal pools, wetlands, alkaline depressions, roadside ditches and other wet places near the coast. 3–164 feet in elevation. Blooms July. Annual/Perennial.	CPER- Not expected to occur. Swale habitat marginally suitable for this species is present in the treatment area. However, botanical surveys conducted within the reserve over multiple years have not detected the species (Hacker, pers. comm., 2023). RMR- **May occur**. Mesic habitat (Strawberry Creek, unnamed drainages, and the pond) suitable for this species is present in the project area.
Ojai fritillary *Fritillaria ojaiensis*	—	—	1B.2	Broadleaved upland forest (mesic), chaparral, lower montane coniferous forest, cismontane woodland. Usually loamy soil. Sometimes on serpentine; sometimes along roadsides. 738–3281 feet in elevation. Blooms February–May. Geophyte.	CPER- Not expected to occur. Suitable forest, woodland, and chaparral habitat is not present in the project area and the project area is outside of the elevational range for this species. RMR- Not expected to occur. Suitable forest, woodland, and chaparral habitat is not present in the project area and the project area is outside of the elevational range for this species.
Cone Peak bedstraw *Galium californicum* ssp. *luciense*	—	—	1B.3	Broadleaved upland forest, lower montane coniferous forest, cismontane woodland, chaparral. In duff or gravelly talus in partial shade. 1312–5003 feet in elevation. Blooms March–September. Perennial.	CPER- Not expected to occur. The project area is outside of the elevational range for this species. RMR- Not expected to occur. The project area is outside of the elevational range for this species.
Hardham's bedstraw *Galium hardhamiae*	—	—	1B.3	Ultramafic. Closed-cone coniferous forest, chaparral. On serpentine with *Cupressus sargentii*. 984–3051 feet in elevation. Blooms April–October. Perennial.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
Mesa horkelia *Horkelia cuneata* var. *puberula*	—	—	1B.1	Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 49–5397 feet in elevation. Blooms February–July. Perennial.	CPER- Not expected to occur. Suitable chaparral, woodland, and coastal scrub habitat is not present in the project area. RMR- Not expected to occur. Suitable chaparral, woodland, and coastal scrub habitat is not present in the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Kellogg's horkelia *Horkelia cuneata* var. *sericea*	—	—	1B.1	Dry, sandy soils in closed-cone coniferous forest, chaparral, coastal scrub, coastal dunes and coastal sandhills. Often in openings. 16–705 feet in elevation. Blooms April–September. Perennial.	CPER- Not expected to occur. Closed-cone coniferous forest habitat suitable for this species is present in the treatment area. There are documented occurrences in the vicinity of the treatment area (CNDDB 2022a; Calflora 2022). A different variety of this species, *Horkelia cuneata* var. *cuneata*, has been documented in CPER However, botanical surveys conducted over multiple years within the reserve have not detected the species (Hacker, pers. comm., 2023).Hacker, pers. comm., 2023) RMR- **May occur**. Closed-cone coniferous forest habitat suitable for this species is present in the project area. There are documented occurrences in the vicinity of the project area (CNDDB 2022; Calflora 2022).
Perennial goldfields *Lasthenia californica* ssp. *macrantha*	—	—	1B.2	Coastal bluff scrub and coastal dunes. 16–607 feet in elevation. Blooms January–November. Perennial.	CPER- Not expected to occur. Suitable coastal bluff scrub and dune habitat is not present in the project area. RMR- Not expected to occur. Suitable coastal bluff scrub and dune habitat is not present in the project area.
Jones' layia *Layia jonesii*	—	—	1B.2	Ultramafic. Chaparral, valley and foothill grassland. Clay soils and serpentine outcrops. 16–1312 feet in elevation. Blooms March–May. Annual.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
Santa Lucia bush-mallow *Malacothamnus palmeri* var. *palmeri*	—	—	1B.2	Dry, rocky slopes usually near summits, but occasionally extending down canyons to the sea. 197–1181 feet in elevation. Blooms May–July. Perennial.	CPER- **Known to occur**. The species has been documented to occur in the treatment area (Hacker, pers. comm., 2023). RMR- **May occur**. Dry, rocky slope habitat suitable for this species is present in the project area.
Palmer's monardella *Monardella palmeri*	—	—	1B.2	Ultramafic. Cismontane woodland, chaparral. On serpentine, often found associated with Sargent cypress forests. 656–2625 feet in elevation. Blooms June–August. Geophyte.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.
Southern curly-leaved monardella *Monardella sinuata* ssp. *sinuata*	—	—	1B.2	Coastal dunes, coastal scrub, chaparral, cismontane woodlands. Sandy soils. 0–984 feet in elevation. Blooms April–September. Annual.	CPER- Not expected to occur. Suitable dune, coastal scrub, chaparral, and woodland habitat is not present in the project area. RMR- Not expected to occur. Suitable dune, coastal scrub, chaparral, and woodland habitat is not present in the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Woodland woollythreads *Monolopia gracilens*	—	—	1B.2	Grassy sites, in openings. Sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. 328–3937 feet in elevation. Blooms March–July. Annual.	CPER- Not expected to occur. Grassland habitat suitable for this species is present in the treatment area. There are two documented occurrences of this species in the vicinity of the treatment area (CNDDB 2022a). However, botanical surveys conducted over multiple years within the reserve have not detected the species (Hacker, pers. comm., 2023). RMR- **May occur**. Grassland habitat suitable for this species is present in the project area. There are two documented occurrences of this species in the vicinity of the project area (CNDDB 2022).
Arroyo de la Cruz lousewort *Pedicularis rigginsiae*	—	—	1B.1	Maritime chaparral. Highly weathered ultramafic or clay soils. 328–509 feet in elevation. Blooms April–June. Perennial.	CPER- Not expected to occur. Suitable chaparral habitat and ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable chaparral habitat and ultramafic soils are not present in the project area.
Monterey pine *Pinus radiata*	—	—	1B.1	Closed-cone coniferous forest, cismontane woodland. Dry bluffs and slopes. Three primary stands are native to California. 197–410 feet in elevation. Perennial.	CPER- **Known to occur**. Monterey pine in the project area is one of the three primary stands native to California. RMR- **Known to occur**. Monterey pine in the project area is one of the three primary stands native to California.
Hooked popcornflower *Plagiobothrys uncinatus*	—	—	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Sandstone outcrops and canyon sides; often in burned or disturbed areas. 984–2493 feet in elevation. Blooms April–May. Annual.	CPER- Not expected to occur. The project area is outside the elevational range of this species. RMR- Not expected to occur. The project area is outside the elevational range of this species.
Adobe sanicle *Sanicula maritima*	—	SR	1B.1	Meadows and seeps, valley and foothill grassland, chaparral, coastal prairie. Moist clay or ultramafic soils. 98–787 feet in elevation. Blooms February–May. Perennial.	CPER- Not expected to occur. Coastal prairie habitat suitable for this species is present in the treatment area; however, this species has not been documented during botanical surveys conducted over multiple years within the reserve (Hacker, pers. comm., 2023). RMR- **May occur**. Coastal prairie habitat suitable for this species is present in the project area; however, this species has not been documented during previous plant surveys (Wahlert, pers. comm., 2022).
Chaparral ragwort *Senecio aphanactis*	—	—	2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 66–2805 feet in elevation. Blooms January–April (May). Annual.	CPER- Not expected to occur. Suitable alkaline habitat is not present in the project area. RMR- Not expected to occur. Suitable alkaline habitat is not present in the project area.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Hickman's checkerbloom *Sidalcea hickmanii* ssp. *hickmanii*	—	—	1B.3	Chaparral. Grassy openings in chaparral, and on dry ridges. 1099–3937 feet in elevation. Blooms May–July. Perennial.	CPER- Not expected to occur. Suitable chaparral habitat is not present in the project area. RMR- Not expected to occur. Suitable chaparral habitat is not present in the project area.
Most beautiful jewelflower *Streptanthus albidus* ssp. *peramoenus*	—	—	1B.2	Ultramafic. Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 312–3281 feet in elevation. Blooms April–September. Annual.	CPER- Not expected to occur. Suitable serpentine microhabitat is not present in the project area. RMR- Not expected to occur. Suitable serpentine microhabitat is not present in the project area.
California seablite *Suaeda californica*	FE	—	1B.1	Wetlands, marshes, and swamps. Margins of coastal salt marshes. 0–16 feet in elevation. Blooms July–October. Perennial.	CPER- Not expected to occur. Suitable coastal salt marsh habitat is not present within the project area. RMR- Not expected to occur. Suitable coastal salt marsh habitat is not present within the project area.
Twisted horsehair lichen *Sulcaria spiralifera*	—	—	1B.2	Coastal dunes. Usually on conifers. 0–295 feet in elevation. Perennial.	CPER- Not expected to occur. Suitable dune habitat is not present in the project area. RMR- Not expected to occur. Suitable dune habitat is not present in the project area.
Cook's triteleia *Triteleia ixioides* ssp. *cookii*	—	—	1B.3	Ultramafic. Cismontane woodland, closed-cone coniferous forest, streamsides, and wet ravines. On serpentine and in serpentine seeps. Sometimes near cypresses. 394–2411 feet in elevation. Blooms May–June. Geophyte.	CPER- Not expected to occur. Suitable ultramafic soils are not present in the project area. RMR- Not expected to occur. Suitable ultramafic soils are not present in the project area.

Notes: CRPR = California Rare Plant Rank; CEQA = California Environmental Quality Act; ESA = Endangered Species Act; CESA = California Endangered Species Act; NPPA = Native Plant Protection Act.

1 Legal Status Definitions

Federal:

FE Federally Listed as Endangered (legally protected by ESA)
FT Federally Listed as Threatened (legally protected by ESA)

State:

SE State Listed as Endangered (legally protected by CESA)
SR State Listed as Rare (legally protected by NPPA)

California Rare Plant Ranks (CRPR):

1A Plant species that are presumed extirpated or extinct because they have not been seen or collected in the wild in California for many years. A plant is extinct if it no longer occurs anywhere. A plant that is extirpated from California has been eliminated from California but may still occur elsewhere in its range.
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
4 Plants of limited distribution—a watch list

CRPR Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

2 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available and there have been nearby recorded occurrences of the species.

Known to occur: The species has been observed within the treatment areas.

Sources: Calflora 2022; CNDDB 2022; CNPS 2022; Hacker, pers. comm., 2023; Wahlert pers. comm., 2022.

Special-Status Wildlife Species Known to Occur in the Vicinity of the Treatment Areas and Their Potential for Occurrence in the Treatment Areas

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Amphibians and Reptiles				
California red-legged frog *Rana draytonii*	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11–20 weeks of permanent water for larval development. Must have access to estivation habitat.	CPER- **May occur**. The species has been documented to occur in multiple locations in and around Cambria (CNDDB 2022). The project area does not contain aquatic habitat suitable for the species; however, the project area may function as upland dispersal habitat and the species may occur in the project area during dispersal events. RMR- **May occur**. The species has been documented to occur in multiple locations in and around Cambria (CNDDB 2022). While surveys for frogs conduced at the pond within the project area did not detect any California red-legged frogs (Seydel, pers. comm., 2022), the presence of the species within the project area cannot be ruled out.
Coast Range newt *Taricha torosa*	—	SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 kilometer to breed in ponds, reservoirs, and slow moving streams.	CPER- **May occur**. The species is documented to occur within Santa Rosa Creek in the vicinity of the project area (CNDDB 2022). The species is known to use upland habitat adjacent to suitable aquatic habitat, and upland habitat suitable for the species is present in the project area. RMR- **May occur**. The species has been documented to occur along Santa Rosa Creek northeast of the project area (CNDDB 2022), and the pond within the project area provides habitat potentially suitable for the species.
Foothill yellow-legged frog *Rana boylii*	—	SE SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	CPER- Not expected to occur. The species is documented to occur historically (1948) within Santa Rosa Creek in the vicinity of the project area (CNDDB 2022); however, the species is believed to have been extirpated from Santa Rosa Creek in the 1970s. The nearest extant occurrence is located along Little Pico Creek north of San Simeon. RMR- Not expected to occur. The species is documented to occur historically (1948) within Santa Rosa Creek northeast of the project area (CNDDB 2022); however, the species is believed to have been extirpated from Santa Rosa Creek in the 1970s. The nearest extant occurrence is located along Little Pico Creek north of San Simeon.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Two-striped gartersnake *Thamnophis hammondii*	—	SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	CPER- Not expected to occur. The species is documented to occur within Santa Rosa Creek in the vicinity of the project area (CNDDB 2022). However, this species is highly aquatic and not likely to move out of Santa Rosa Creek and associated riparian habitat into the project area. There is no aquatic habitat suitable for the species within the project area. RMR- **May occur**. The species has been documented to occur along Santa Rosa Creek northeast of the project area (CNDDB 2022), and the pond within the project area provides habitat potential suitable for the species.
Western pond turtle *Emys marmorata*	—	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to approximately 1,500 feet from aquatic habitat for egg-laying.	CPER- **May occur**. The species is documented to occur within Santa Rosa Creek in the vicinity of the project area (CNDDB 2022). While Santa Rosa Creek Road and Main Street separate the project area from the creek itself and there is no aquatic habitat suitable for western pond turtle within the project area, grassland portions of the project area within 1,500 feet of the creek could provide upland nesting habitat suitable for the species. RMR- **May occur**. The species is documented to occur adjacent to the project area in the vicinity of Pineridge Drive (CNDDB 2022). The pond within the project area provides aquatic habitat suitable for the species, and there are open slopes for nesting locations near the pond.
Birds				
Bald eagle *Haliaeetus leucocephalus*	—	SE FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	CPER- Not expected to occur. The species is documented to occur in several locations around Lake Nacimiento, approximately 10 miles to the east of the project area. The town of Cambria is between the project area and the Pacific Ocean. Santa Rosa Creek near the project area is not likely of sufficient size to provide foraging habitat suitable for this species. RMR- **May occur**. The project is near the Pacific Ocean and the larger trees and snags in the project area could provide nesting habitat suitable for the species.
Grasshopper sparrow *Ammodramus savannarum*	—	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	CPER- **May occur**. The species has been documented to occur approximately 3.5 miles from the project area in the vicinity of North Green Valley Road (CNDDB 2022). The project area contains native grassland habitat that is potentially suitable for the species. RMR- **May occur**. The species has been documented to occur approximately 3.5 miles from the project area in the vicinity of North Green Valley Road (CNDDB 2022). The small grassland portions of the project area may provide habitat suitable for the species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Northern harrier *Circus hudsonius*	—	SSC	Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	CPER- Not expected to occur. The project area does include some grassland habitat; however, this portion of the project area is close to residences and not anticipated to be used by the species due to the species' sensitivity to human disturbance. RMR- Not expected to occur. The project area does include some grassland habitat; however, this portion of the project area is close to residences and not anticipated to be used by the species due to the species' sensitivity to human disturbance
Western snowy plover *Charadrius nivosus nivosus*	FT	SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	CPER- Not expected to occur. The project area does not include sandy beach or similar sandy habitat suitable for the species. RMR- Not expected to occur. The project area does not include sandy beach or similar sandy habitat suitable for the species.
Fish				
Steelhead - south-central California coast DPS *Oncorhynchus mykiss irideus* pop. 9	FT	—	Aquatic. Sacramento/San Joaquin flowing waters. South coast flowing waters. Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	CPER- Not expected to occur. The treatment area does not contain any perennial streams that would provide habitat suitable for this species. Furthermore, the ephemeral drainages in the treatment area are not likely to carry water to Santa Rosa Creek (the nearest habitat potentially suitable for the species) except in extreme rainfall events. RMR- Not expected to occur. The treatment area does not contain any perennial streams that would provide habitat suitable for this species. While the ephemeral drainages within the treatment area flow to the Pacific Ocean, there is no potential fish passage into these waters due to the height of the cliffs at the oceans edge.
Steelhead - southern California DPS *Oncorhynchus mykiss irideus* pop. 10	FE	—	Aquatic. South coast flowing waters. Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	CPER- Not expected to occur. The treatment area does not contain any perennial streams that would provide habitat suitable for this species. Furthermore, the ephemeral drainages in the treatment area are not likely to carry water to Santa Rosa Creek (the nearest habitat potentially suitable for the species) except in extreme rainfall events. RMR- Not expected to occur. The treatment area does not contain any perennial streams that would provide habitat suitable for this species. While the ephemeral drainages within the treatment area flow to the Pacific Ocean, there is no potential fish passage into these waters due to the height of the cliffs at the oceans edge.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Tidewater goby *Eucyclogobius newberryi*	FE	SSC	Aquatic, Klamath/north coast flowing waters, Sacramento/San Joaquin flowing waters, South coast flowing waters. Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	CPER- Not expected to occur. The treatment area does not contain any perennial streams or brackish water lagoons that would provide habitat suitable for this species. RMR- Not expected to occur. The treatment area does not contain any perennial streams or brackish water lagoons that would provide habitat suitable for this species.
Invertebrates				
Crotch bumble bee *Bombus crotchii*	–	CE	Coastal California east to the Sierra-Cascade crest and south into Mexico. Suitable habitats include grasslands and scrub. Food plant genera include *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia*, and *Eriogonum.*	CPER- **May occur**. The project area contains grassland and scrub habitat and adjoining forest potentially suitable for the species. The project area is at the edge of the current range of the species (CDFW 2019). Although no recent detections have been documented in the project vicinity (CNDDB 2022), bumble bees are difficult to identify to species and may be underreported. RMR- **May occur**. The project area contains grassland habitat and adjoining forest potentially suitable for the species. The project area is at the edge of the current range of the species (CDFW 2019). Although no recent detections have been documented in the project vicinity (CNDDB 2022), bumble bees are difficult to identify to species and may be underreported.
Monarch butterfly *Danaus plexippus*	FC	—	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	CPER- **May occur**. Multiple overwintering sites in and around Cambria (CNDDB 2022). The treatment area may contain stands of Monterey pine that are of sufficient density to provide protection from winds and therefore suitable overwintering habitat for monarch butterfly. RMR- **May occur**. Multiple overwintering sites in and around Cambria (CNDDB 2022). The treatment area may contain stands of Monterey pine that are of sufficient density to provide protection from winds and therefore suitable overwintering habitat for monarch butterfly.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Mammals				
Monterey dusky-footed woodrat *Neotoma macrotis luciana*	—	SSC	Found in forest habitats of moderate canopy and moderate to dense understory, and in chaparral habitats. Nests constructed of grass, leaves, sticks, and feathers. Population may be limited by availability of nest materials	CPER- **May occur**. The species is documented to occur to the east of the project area (CNDDB 2022). The project area is within the range of the species (Koenig 2015) and habitat suitable for woodrats occurs within the project area. RMR- **May occur**. The species is documented to occur to the east of the project area (CNDDB 2022). The project area is within the range of the species (Koenig 2015) and habitat suitable for woodrats occurs within the project area.
Mountain lion *Puma concolor*	—	CT	Mountain lions inhabit a wide range of ecosystems, including mountainous regions, forests, deserts, and wetlands. Mountain lions establish and defend large territories and can travel large distances in search of prey or mates. The Central Coast and Southern California ESU was granted emergency listing status in April of 2020, and CDFW is currently reviewing a petition to list these ESUs as threatened under CESA.	CPER- **May occur**. The project area is within the range of the Central Coast ESU and provides foraging habitat suitable for the species. However, the project area does not contain dense brush fields, rocky areas, or similar habitats located away from human disturbance that would be suitable for denning or nursery habitat. RMR- **May occur**. The project area is within the range of the Central Coast ESU and provides foraging habitat suitable for the species. However, the project area does not contain dense brush fields, rocky areas, or similar habitats located away from human disturbance that would be suitable for denning or nursery habitat.
Pallid bat *Antrozous pallidus*	—	SSC	Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	CPER- **May occur**. The species has been documented to occur historically in the project vicinity (CNDDB 2022). The largest snags and live trees with cavities may provide roosting sites for the species. RMR- **May occur**. The species has been documented to occur historically in the project vicinity (CNDDB 2022). The largest snags and live trees with cavities may provide roosting sites for the species.
Ringtail *Bassariscus astutus*	—	FP	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations. Often found near, but not limited to, a permanent water source.	CPER- **May occur**. The species has been documented to occur historically within San Luis Obispo County (Belluomini 1980) and recently within coastal southern Monterey County north of the project area (iNaturalist 2022). The forest and shrub habitats within the project area are potentially suitable for the species. RMR- **May occur**. The species has been documented to occur historically within San Luis Obispo County (Belluomini 1980) and recently within coastal southern Monterey County north of the project area (iNaturalist 2022). The forest and shrub habitats within the project area are potentially suitable for the species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Townsend's big-eared bat *Corynorhinus townsendii*	—	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	CPER- **May occur**. The species has been documented to occur historically in the project vicinity (CNDDB 2022). The largest snags and live trees with cavities may provide roosting sites for the species. RMR- **May occur**. The species has been documented to occur historically in the project vicinity (CNDDB 2022). The largest snags and live trees with cavities may provide roosting sites for the species.

Notes: CNDDB = California Natural Diversity Database; CDFW = California Department of Fish and Wildlife; CEQA = California Environmental Quality Act; CESA = California Endangered Species Act; CPER = Cambria Pines Ecological Reserve; DPS = Distinct Population Segment; ESU = Evolutionary Significant Unit; RMR = Rancho Marino Reserve.

1 Legal Status Definitions

Federal:

FE Federally Listed as Endangered (legally protected)
FT Federally Listed as Threatened (legally protected)
FC Candidate for Listing under the federal Endangered Species Act

State:

FP Fully Protected (legally protected)
SSC Species of Special Concern (no formal protection other than CEQA consideration)
SE State Listed as Endangered (legally protected)
CE Candidate for listing as Endangered (legally protected)
CT Candidate for listing as Threatened (legally protected)

2 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.
May occur: Suitable habitat is available; however, there are little to no other indicators that the species might be present.
Known to occur: Species has been documented within the treatment area.

Sources: CNDDB 2022; Belluomini 1980; iNaturalist 2022.

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Attachment D

Hazardous Materials

PROJECT SEARCH RESULTS

STATUS: All Statuses GO

SEARCH CRITERIA: CAMBRIA

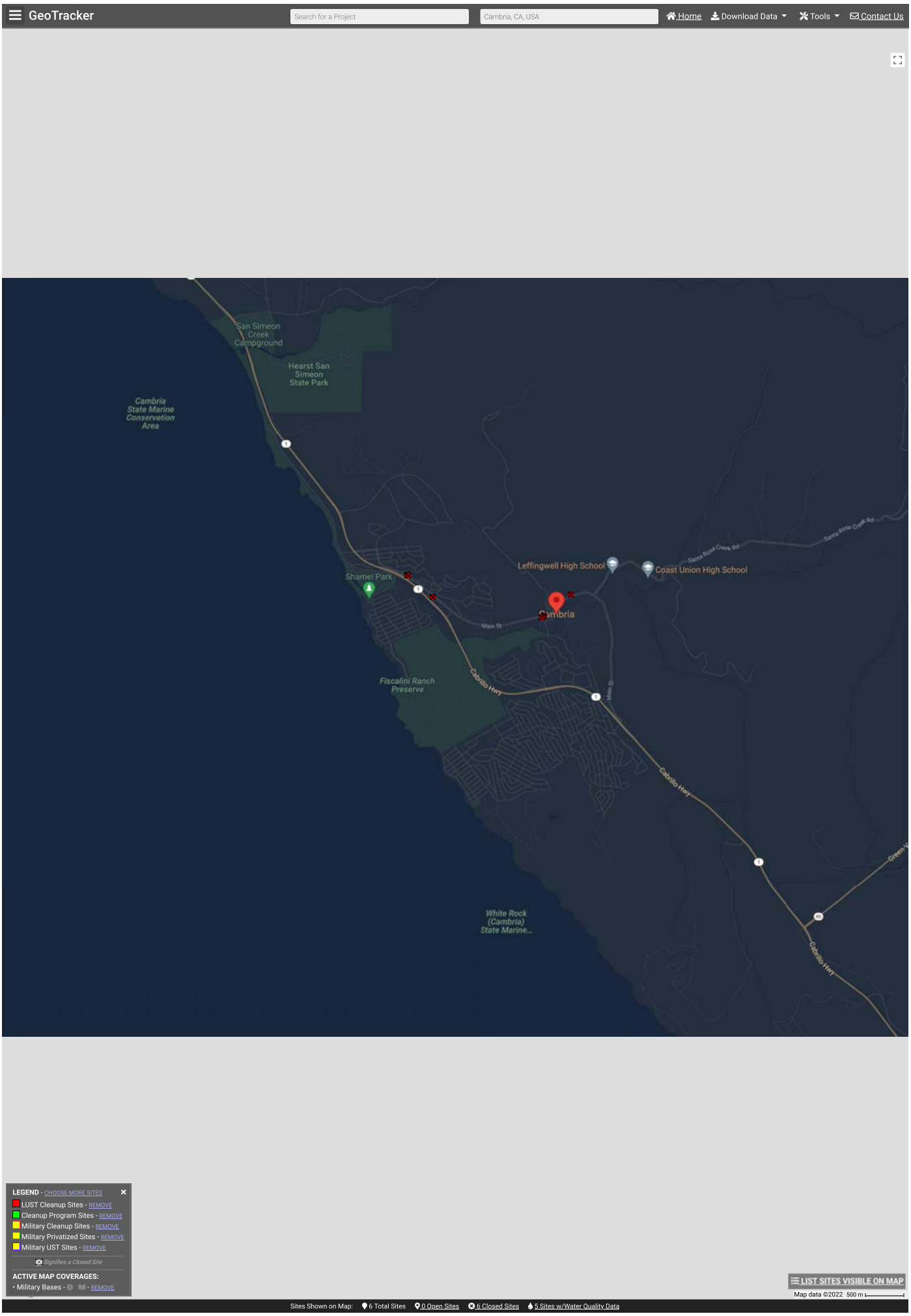
8 RECORDS FOUND EXPORT TO EXCEL

		SITE / FACILITY NAME	ESTOR / EPA ID	PROGRAM TYPE	STATUS	ADDRESS DESCRIPTION	CITY	ZIP	CALENVIR SC
[REPORT]	[MAP]	(CAFS) COMMUNITY FAC	80000029	MILITARY EVALUATION	INACTIVE - ACTION REQUIRED		CAMBRIA		1-
[REPORT]	[MAP]	(CAFS) FAMILY HOUSING	80000047	MILITARY EVALUATION	INACTIVE - NEEDS EVALUATION		CAMBRIA		5-
[REPORT]	[MAP]	CAMBRIA AFSTA	80000209	MILITARY EVALUATION	INACTIVE - NEEDS EVALUATION		CAMBRIA		1-
[REPORT]	[MAP]	CAMBRIA COMM FAC ANNEX	80000073	MILITARY EVALUATION	INACTIVE - NEEDS EVALUATION		CAMBRIA		1-
[REPORT]	[MAP]	CAMBRIA ELEMENTARY SCHOOL	40020003	SCHOOL EVALUATION	NO ACTION REQUIRED	EAST MAIN STREET/STATE HIGHWAY 1	CAMBRIA	93428	10-
[REPORT]	[MAP]	COAST UNION HIGH SCHOOL	40820001	SCHOOL EVALUATION	NO ACTION REQUIRED	2950 SANTA ROSA CREEK ROAD	CAMBRIA	93428	5-
[REPORT]	[MAP]	ELEMENTARY SCHOOL/RHOADES PROPERTY	40010001	SCHOOL EVALUATION	NO ACTION REQUIRED	EAST MAIN STREET/STATE HIGHWAY	CAMBRIA	93428	10-
[REPORT]		THE TECHNOLOGY COLLECTIVE	CAL000473308	INSPECTION	NO ACTION	828 MAIN STREET	CAMBRIA	93428	5-

6.640625E-02 seconds

SITES IDENTIFIED WITH WASTE CONSTITUENTS ABOVE HAZARDOUS WASTE LEVELS OUTSIDE THE WASTE MANAGEMENT UNIT

COUNTY	CITY	REGION	SWAT F	WASTE DISCHARGER SYSTEM NO.	SOLID WASTE ID NO.	WASTE MANAGEMENT UNIT NAME	FACILITY NAME	AGENCY NAME
DEL NORTE	CRESCENT CITY	1	2	1A880520NSL-01		DEL NORTE COUNTY- PESTICIDE STORAGE	DEL NORTE PESTICIDE STORAGE AR	DEL NORTE, COUNTY OF
CONTRA COSTA	PITTSBURG	2	1	2 071059002-02	07-A1-0001	U.S. STEEL CORP.-PITTSBURG SITE LA	WDR-USS-POSCO	USS-POSCO
SOLANO	VALLEJO	2	1	2 482011003-01	48-AA-0008	US NAVY MARE ISLAND SANITARY LANDFILL	WDR-NAVAL SHIPYARD/CLASS I LAN	MARE ISLAND NAVAL SHIPYARD
CONTRA COSTA	RICHMOND	2	3	2 071007002-01		CHEVRON CHEMICAL COMPANY-OLD SITES	WDR-ORTHO DIV-RICHMOND PLANT	CHEVRON CHEMICAL COMPANY
MONTEREY	FORT ORD (Marina)	3	1	3 270301004-01	27-AA-0015	FORT ORD LANDFILL	SANITARY LANDFILL	U.S. ARMY, FORT ORD
SANTA BARBARA	LOMPOC	3	3	3 420305001-01	42-AA-0017	LOMPOC CITY LANDFILL	SOLID WASTE DISPOSAL SITE	LOMPOC CITY
LOS ANGELES	MONTEREY PARK	4	1	4B190332001-01	19-AM-0001	OPERATING INDUSTRIES LANDFILL	OPERATING INDUSTRIES, INC.	OPERATING INDUSTRIES, INC.
TULARE	WOODLAKE	5F	1	5D540300010-01	54-AA-0007	TULARE COUNTY-WOODLAKE LANDFILL	WOODLAKE SWDS	TULARE, COUNTY OF
FRESNO	FRESNO	5F	2	5D100300001-01		MCKINLEY AVE. YARD	T.H. AGRICULTURE AND NUTRITION	NORTH AMERICAN PHILLIPS
KINGS	CORCORAN	5F	2	5D160302001-01	16-AA-0011	KINGS COUNTY-CORCORAN LANDFILL	CORCORAN SWDS	KINGS COUNTY WASTE MGMT AUTH.
FRESNO	FRESNO	5F	3	5D100319001-01	10-AA-0013	ORANGE AVENUE DISPOSAL COMPANY	ORANGE AVENUE LANDFILL	ORANGE AVENUE DISP CO. INC
TULARE	EXETER	5F	3	5D540300003-01	54-AA-0002	TULARE COUNTY-EXETER DISPOSAL SITE	EXETER SWDS	TULARE, COUNTY OF
MERCED	ATWATER	5F	4	5C240115001-01		ATWATER CITY	BERT CRANE ROAD LANDFILL	ATWATER, CITY OF
FRESNO	FOWLER	5F	5	5D100325N01-01		FOWLER CITY	FOWLER CITY LANDFILL (OLD)	FOWLER, CITY OF
BUTTE	OROVILLE	5R	2	5A042005001-01		KOPPERS COMPANY-OROVILLE SITE	KOPPERS WOOD PRESERVING ISW	KOPPERS INDUSTRIES INC.
BUTTE	CHICO	5R	4	5A040302N01-01		CHICO CITY BURN DUMP	HUMBOLDT ROAD LANDFILL	CHICO, CITY OF
SACRAMENTO	SACRAMENTO	5S	1	5A340700003-01	34-AA-0008	US AIR FORCE-MCCLELLAN AFB LANDFILL	CLASS III SITE 8 (CLOSURE)	US AIR FORCE-MCCLELLAN AFB
SACRAMENTO	MATHER (Rancho Cordova)	5S	2	5A340700001-01		US AIR FORCE-MATHER FIELD LANDFILL	MATHER AFB ENVIRONMENTAL MGMT	US AIR FORCE – MATHER AFB
SACRAMENTO	SACRAMENTO	5S	3	5B342000N01-01		SACRAMENTO ARMY DEPOT	SACRAMENTO ARMY DEPOT	U.S. ARMY
SAN JOAQUIN	STOCKTON	5S	3	5 390002NUR-01	39-AA-0006	US NAVY COMMUNICATIONS LANDFILL	U.S.N. COMMUNICATION STA. LANDF	U.S. NAVY COMMUNICATIONS
SAN JOAQUIN	FRENCH CAMP	5S	3	5 390003NUR-01		US ARMY-SHARPE ARMY DEPOT	US ARMY-SHARPE ARMY DEPOT	US ARMY
SAN JOAQUIN	TRACY	5S	5	5 390006NUR-01		SITE 300 (OTHER 39 WMUS)	LAWRENCE LIVERMORE LAB	LAWRENCE LIVERMORE LABS
INYO	KEELER	6V	1	6B142000041-01	14-AA-0008	US TUNGSTEN OWENS LAKE LANDFILL	OWENS LAKE LANDFILL	UMETCO MINERALS CORPORATION
ORANGE	FULLERTON	8	1	8300002NUR-01		MCCOLL SITE	MCCOLL SLUDGE DISPOSAL SITE	TOXIC SUBSTANCES CONTROL DIVIS
RIVERSIDE	RIVERSIDE	8	1	8 330325001-01		STRINGFELLOW QUARRY ACID PITS	STATE OF CALIFORNIA-STRINGFELLOW	TOXIC PROGRAM MANAGEMENT SECT


GeoTracker
Search for a Project
Cambria, CA, USA
Home
Download Data
Tools
Contact Us
San Simeon Creek Campground
Hearst San Simeon State Park
Cambria State Marine Conservation Area
Shamel Park
Leffingwell High School
Coast Union High School
Santa Rosa Creek Rd
Main St
Cambria
Fiscalini Ranch Preserve
Cabrillo Hwy
White Rock (Cambria) State Marine...
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Signifies a Closed Site
ACTIVE MAP COVERAGES:
• Military Bases - REMOVE
LIST SITES VISIBLE ON MAP
Map data ©2022 500 m
Sites Shown on Map: 6 Total Sites 0 Open Sites 6 Closed Sites 5 Sites w/Water Quality Data