CalVTP Project-Specific Analysis and Addendum December 2023

# Lafayette/Walnut Creek Shaded Fuel Break Project
# Contra Costa County, California

CalVTP ID 2023-36

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## CONTENTS

## FIGURES



## TABLES

## ATTACHMENTS

## LIST OF ABBREVIATIONS

| | |
|---|---|
| AB | Assembly Bill |
| BAAQMD | Bay Area Air Quality Management District |
| BMP | best management practice |
| CAAQS | California Ambient Air Quality Standards |
| CalEPA | California Environmental Protection Agency |
| CAL FIRE | California Department of Forestry and Fire Protection |
| Cal-IPC | California Invasive Plant Council |
| CalVTP | California Vegetation Treatment Program |
| CARB | California Air Resources Board |
| CCCFPD | Contra Costa County Fire Protection District |
| CDFW | California Department of Fish and Wildlife |
| CDP | Coastal Development Permit |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CRHR | California Register of Historical Resources |
| CWHR | California Wildlife Habitat Relationship |
| DBH | diameter at breast height |
| DPR | Department of Pesticide Regulation |
| EBMUD | East Bay Municipal Utility District |
| EIR | Environmental Impact Report |
| EPA | Environmental Protection Agency |
| ESA | Federal Endangered Species Act |
| ESHA | Environmentally Sensitive Habitat Area |
| FEMA | Federal Emergency Management Agency |
| GHG | greenhouse gas |
| GIS | Geographic Information Systems |
| GPS | Global Positioning System |
| HCP | Habitat Conservation Plan |

| | |
|---|---|
| I-680 | Interstate 680 |
| IAP | incident action plan |
| ITP | Incidental Take Permit |
| LCP | Local Coastal Program |
| LUST | leaking underground storage tank |
| MM | mitigation measure |
| MMRP | mitigation monitoring and reporting program |
| MOFD | Moraga-Orinda Fire District |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NCCP | Natural Community Conservation Plan |
| n.d. | no date |
| NOA | naturally occurring asbestos |
| NOAA | National Oceanic and Atmospheric Administration |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NWIC | Northwest Information Center |
| OHP | Office of Historic Preservation |
| PEIR | Programmatic Environmental Impact Report |
| PFIRS | Prescribed Fire Information Reporting System |
| PG&E | Pacific Gas and Electric Company |
| PRC | Public Resources Code |
| PSA | Project-Specific Analysis |
| RPF | Registered Professional Forester |
| RWQCB | Regional Water Quality Control Board |
| SCP | Scientific Collecting Permit |
| SENL | single event noise level |
| SOD | Sudden Oak Death |
| SPR | standard project requirement |
| SRA | State Responsibility Area |
| SWRCB | State Water Resources Control Board |

| | |
|---|---|
| TMP | traffic management plan |
| US | United States |
| USFWS | US Fish and Wildlife Service |
| USGS | US Geological Survey |
| VMT | vehicle miles traveled |
| WLPZ | Watercourse and Lake Protection Zone |
| WUI | wildland-urban interface |

# 1.0 INTRODUCTION

## 1.1 Overview of the Proposed Project

The Contra Costa County Fire Protection District (CCCFPD; District) is proposing the 299-acre Lafayette/ Walnut Creek Shaded Fuel Break Project (Project) within its Contra Costa County service area, located in the San Francisco East Bay Area (Figure 1). CCCFPD protects twelve cities and most of the unincorporated areas of Contra Costa County. The District encompasses 558 square miles (357,120 acres) of wildland-urban intermix area properties, including an array of critical SF Bay Area regional infrastructure, and provides fire protection to Local Responsibility Areas (LRAs) and State Responsibility Areas (SRAs).

To expedite Project implementation, the Project is divided into two phases (Figure 2). Phase I (268 acres) covers land in Walnut Creek and Lafayette that is owned primarily by the Golden Rain Foundation. Phase II (31 acres) covers an area that connects the Project to the Tunnel East Bay Hills Shaded Fuel Break through Moraga, and land that is owned by multiple owners and trusts. The entire Project footprint is located in a Mutual Threat Zone, with 284 acres in LRA and 15 acres in SRA. CCCFPD and the adjacent Moraga-Orinda Fire District (MOFD) protect several communities that are believed to be amongst those at greatest risk of a major urban-intermix fire in the San Francisco Bay Area. Lafayette and Moraga are designated Wildland Urban Interface (WUI) Communities at Risk. Portions of the City of Walnut Creek are also in a designated WUI, including Rossmoor, where the average resident's age is 77. Most of the Project is located within a High Fire Hazard Severity Zone. A portion in Rossmoor is located within a Very High Fire Hazard Severity Zone, and it is also the furthest point from the only means of egress out of the community for over 10,000 mostly elderly residents.

The Project would collectively protect over 30,000 residents and approximately 13,000 acres of wildland-urban intermix area in the East Bay hills. The area includes more than 17,000 parcels in portions of the City of Lafayette, City of Walnut Creek, Town of Moraga, unincorporated areas of Alamo, and the East Bay Regional Park District. The California Department of Forestry and Fire Protection (CAL FIRE) lists all four of these communities as communities at risk from wildfire. The California Air Resources Board (CARB) also lists the Rossmoor area in Walnut Creek as a low-income community and a Community at Risk. Adjacent unincorporated communities include Bollinger Canyon and the Community of Canyon in the SRA, and the incorporated areas of Moraga, Orinda, Oakland, Alamo, and Pleasant Hill.

The Project area includes critical watershed, power transmission lines and substations, major transportation routes, and critical telecom facilities that collectively provide services to millions of regional residents. These include State Highway 24, Interstate 680 (I-680), a Pacific Gas and Electric Company (PG&E) substation, and major power lines serving a significant portion of the East Bay. The Project would decrease the risk of wildfire-related disruptions to critical services and protect multiple community centers.

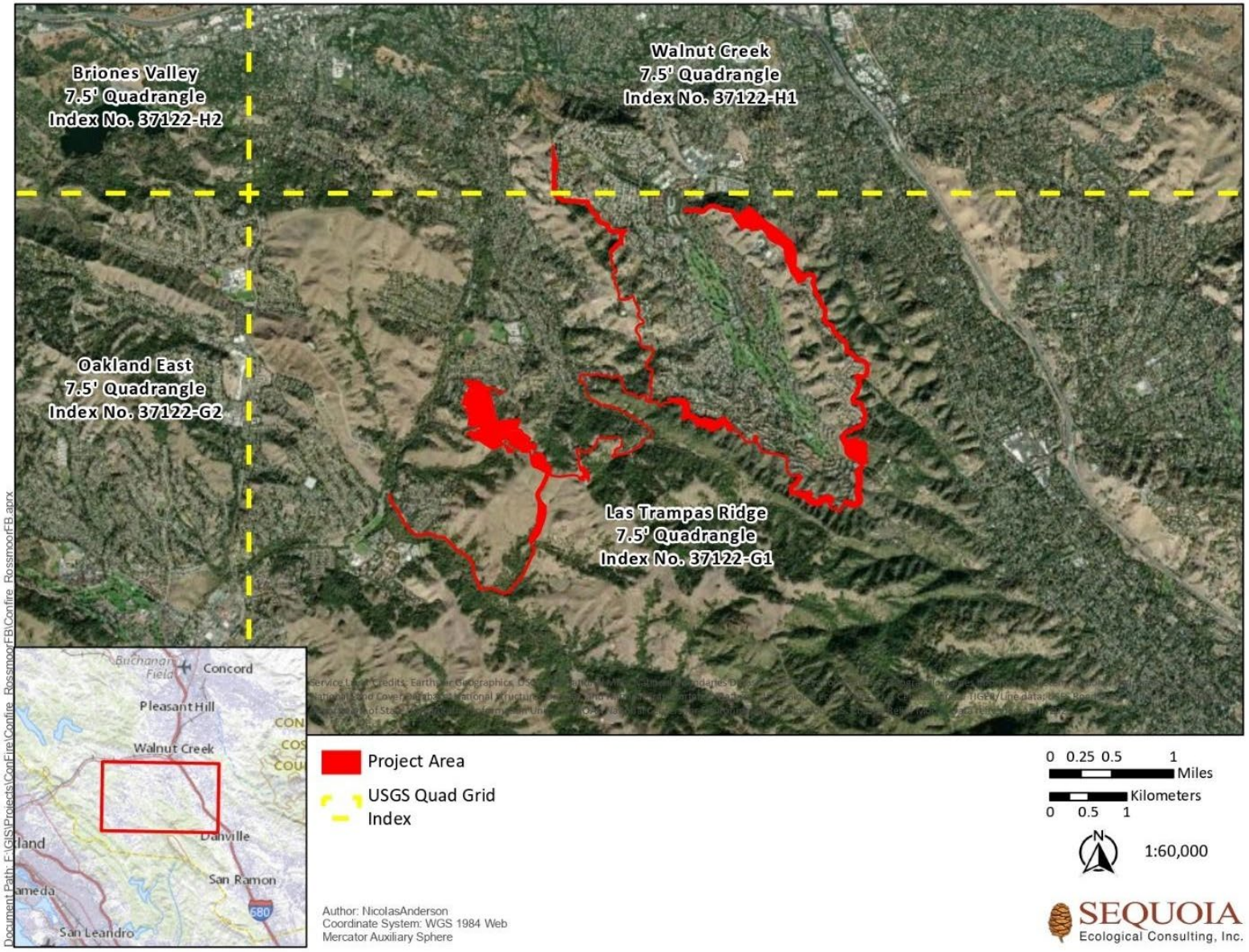



**Figure 1.** Location Map of the Lafayette/Walnut Creek Shaded Fuel Break Project Site.

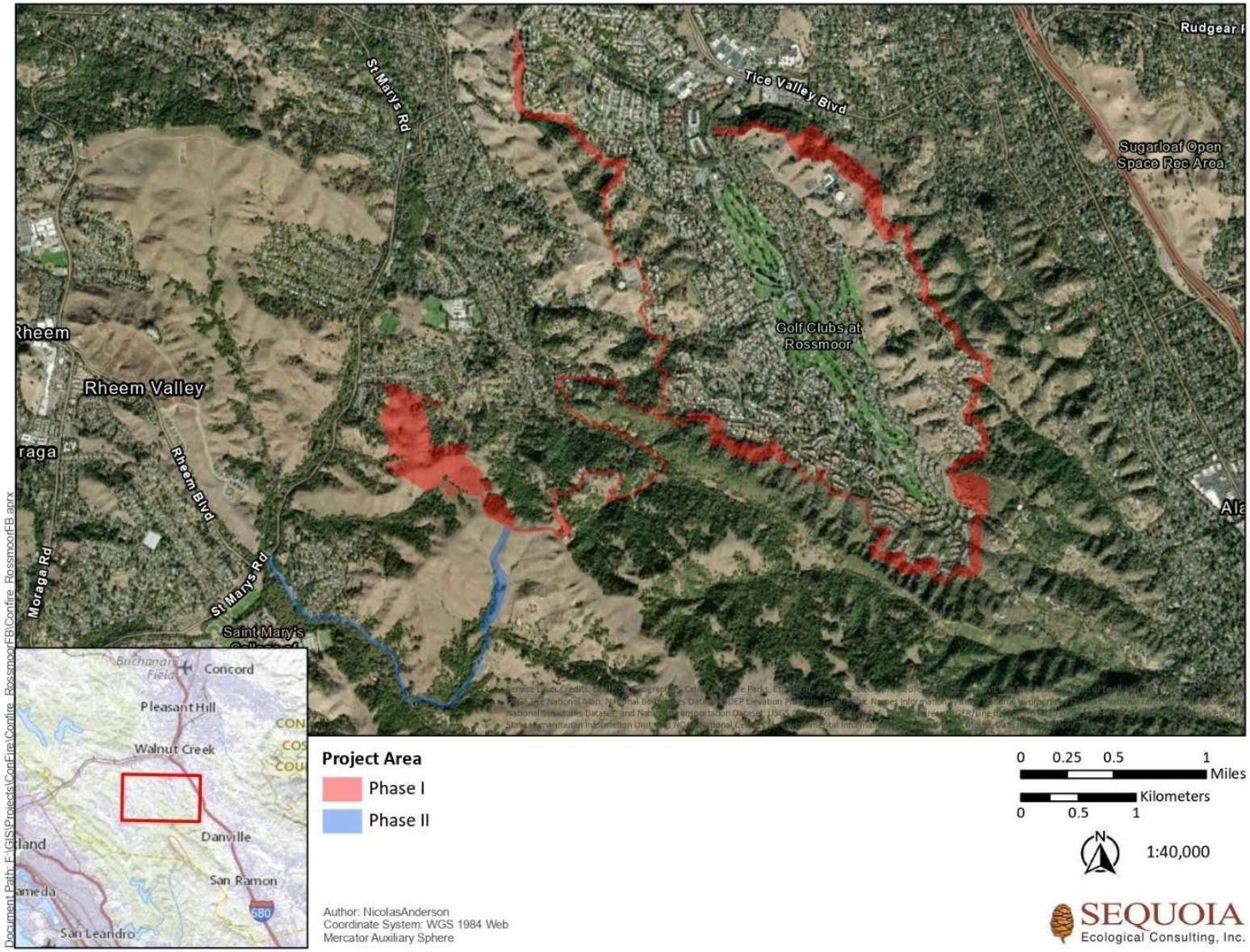



**Figure 2.** Vicinity Map of the Lafayette/Walnut Creek Shaded Fuel Break Project Site.

Elements of this Project would include publicity to build support and awareness of the Project amongst residents of the region; continued defensible space and home hardening education and enforcement to reinforce the Project's benefits; and fuel reduction/removal management to include all environmental monitoring and fuel treatment operations. This Project would be carried out in coordination with CCCFPD's ongoing community education/outreach efforts to aggressively reduce the risk of wildfire in the region. Working collaboratively with the MOFD, East Bay Regional Park District, Rossmoor, HOAs, and community members, the Project would result in the following outcomes:

- Reduction of biomass of woody and vegetative material available for combustion,
- Significant reduction in the probability of uncontrolled wildfires starting in or entering the East Bay hills,
- Increased effectiveness of defensible space surrounding residential structures in the East Bay hills area,
- Decrease available woody and vegetative material for conversion to greenhouse gases through unplanned combustion processes (e.g., wildfire), and
- Provide a safer community with improved evacuation routes and access points for fire crews to establish anchor points.

The goal of the Project is to create and maintain a reduced fuel zone around Contra Costa County's Rossmoor community (Figures 1 and 2). The Project would provide a strategic location for firefighters to suppress fires, reduce the intensity of incipient fires, and prevent incipient fires from laddering into the tree canopy or causing fires to drop to the ground within the fuel break and WUI. The treatments proposed in this Project-Specific Analysis (PSA) would reduce dangerous wildfire fuels in a deliberate manner designed to minimize environmental impacts to wildlife and protected plants consistent with the California Vegetation Treatment Program (CalVTP) Programmatic Environmental Impact Report (PEIR; Ascent Environmental 2019). The Project would involve conducting vegetation management activities to contribute shaded fuel break/WUI fuel reduction as part of a regional effort, totaling approximately 12 miles of fuel break and WUI fuel reduction within an approximately 299-acre area.

The CalVTP PEIR identified 20.3 million acres across the State of California within 31-million-acre SRAs that may be appropriate for vegetation treatments as part of the CalVTP. The PEIR calls this the "treatable landscape" or "treatable areas." CalVTP recognizes that the treatable landscape represents areas suitable for CalVTP vegetation treatments, but projects would not necessarily occur in every location within the treatable landscape. The location and geographic extent of projects would be determined based on several factors, including environmental constraints and treatment objectives, which are analyzed for the proposed project within this PSA. Of the approximately 299-acre Project footprint, approximately 51 acres are located within the CalVTP treatable landscape, and approximately 248 acres are outside of the defined treatable landscape (Figure 3).

An Addendum to an Environmental Impact Report (EIR) is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts, consistent with California Environmental Quality Act (CEQA) Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168. In this case, there are no changed circumstances, but the proposed revision or change in the Project, compared to the PEIR, is the inclusion of areas of the scattered sections of LRA outside of the CalVTP treatable landscape. The PSA checklist (refer to Section 3, "Environmental Checklist") includes the criteria to support an Addendum to the CalVTP PEIR for the inclusion of proposed treatment areas outside the CalVTP treatable landscape. The checklist evaluates each resource in terms of whether the later treatment project, including the "changed condition" of additional geographic area, would result in significant impacts that would be substantially more severe than those covered in the CalVTP PEIR and/or would result in any new impacts that were not covered in the PEIR. This document serves as both a PSA and an Addendum to the CalVTP PEIR to provide CEQA compliance for the proposed vegetation treatments within and outside of the treatable landscape. The Project-specific mitigation monitoring and reporting program (MMRP), which includes the CalVTP standard project requirements (SPRs) and mitigation measures (MMs) applicable to the proposed Project, is presented in Attachment A. The SPRs identified in the MMRP have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation of the proposed Project.

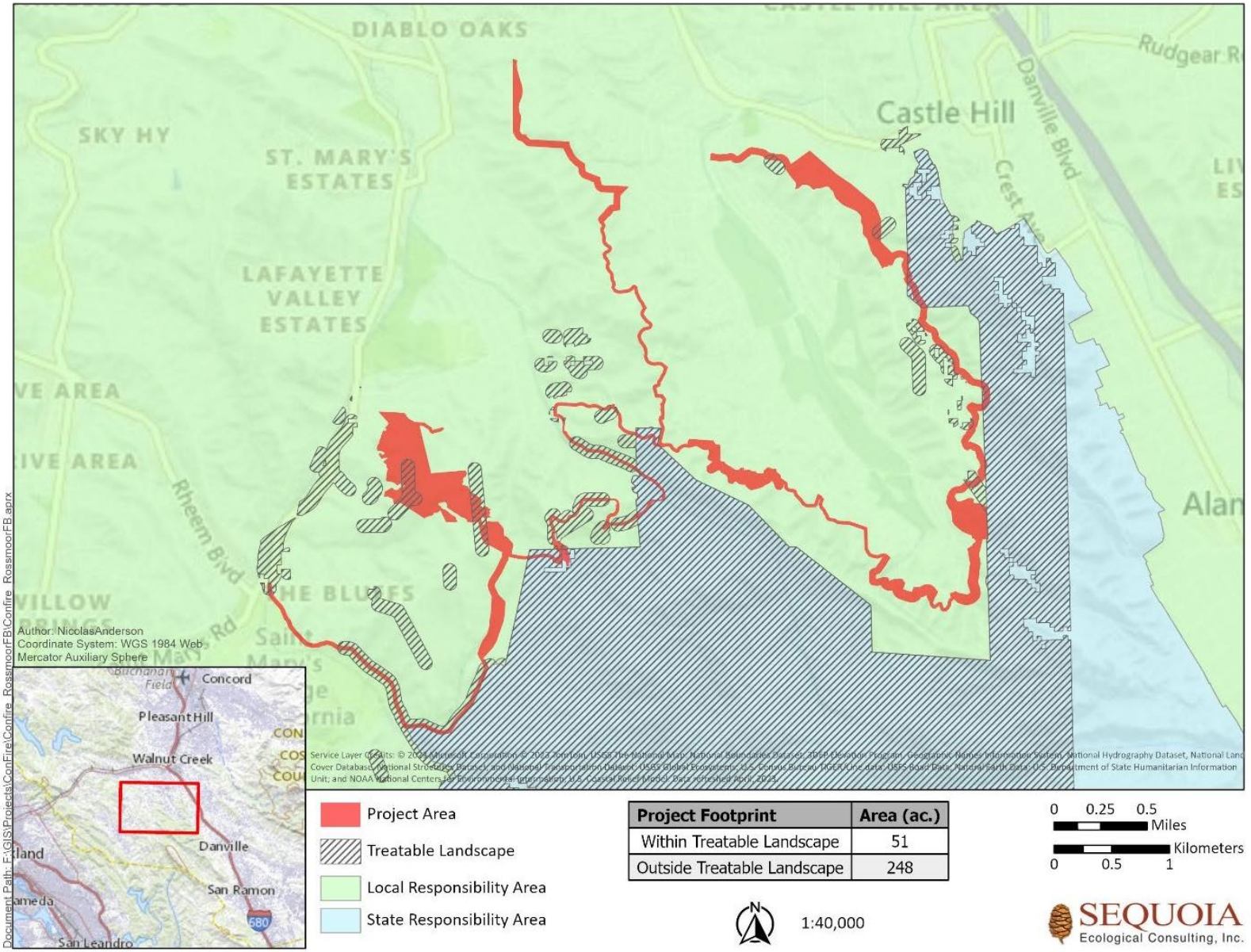



**Figure 3.** Treatable Landscape on the Lafayette/Walnut Creek Shaded Fuel Break.

## 1.2 California Environmental Quality Act

The CalVTP PEIR evaluated the potential environmental effects of implementing qualifying vegetation treatments to reduce the risk of wildfire within CAL FIRE's SRA.

Serving as the lead agency under the CEQA, CCCFPD proposes to implement vegetation treatments on 299 acres of land within Contra Costa County. The proposed treatment types include shaded fuel breaks and fuel reduction at the WUI. The treatment activities and methods include manual vegetation management, mechanical treatment, prescribed herbivory treatment, herbicide application, and prescribed burning.

CCCFPD has evaluated the proposed treatments for CEQA compliance as later activities covered by the CalVTP PEIR using the PSA checklist herein. These treatment types and treatment activities are consistent with those covered in the CalVTP PEIR. Ongoing maintenance of the proposed vegetation treatments would involve the same activities as the original treatments (i.e., manual, mechanical, prescribed herbivory, herbicide, and prescribed burning treatments).

## 1.3 Purpose of this Project-Specific Analysis and Addendum

This document serves as the PSA to evaluate whether the proposed Project is within the scope of the CalVTP PEIR. As described above, the treatment types and treatment activities are consistent with the CalVTP, which identifies the portion of the SRA that may be appropriate for vegetation treatments as "the treatable landscape." One criterion for determining whether a treatment project is within the scope of the CalVTP PEIR is whether it is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the PEIR). Within the Project area, 51 acres are within the treatable landscape and 248 acres are outside of the treatable landscape (Figure 3).

The PSA checklist (see Section 3) includes the criteria to support an addendum to the CalVTP PEIR for the inclusion of proposed treatment areas outside the CalVTP treatable landscape. The checklist evaluates each resource in terms of whether the later treatment Project, including the "changed condition" of additional geographic area, would result in significant impacts that would be more severe than those covered in the CalVTP PEIR and/or would result in any new impacts that were not covered in the PEIR. The Project-specific MMRP, which includes the CalVTP SPRs and MMs applicable to the proposed Project, is presented in Attachment A. The SPRs and MMs have been tailored to 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 all cases, the additional Project-specific implementation instructions and clarifying edits to MMs maintain the SPRs and MMs as equivalent or more effective than those presented in the PEIR. Where applicable, the SPRs identified in the MMRP have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation of the proposed Project.

This document also serves as an addendum to the CalVTP PEIR for the inclusion of the additional 248 acres outside of the treatable landscape. An addendum to an EIR is appropriate when a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts. In this case, there are no changed circumstances.

# 2.0 PROJECT DESCRIPTION

The proposed Project would create and maintain a 299-acre reduced fuel zone in the San Francisco East Bay within CCCFPD's service area around the Rossmoor Community in Contra Costa County, California (Figures 1 and 2). The Project would result in the collective protection of over 30,000 residents by creating a shaded fuel break approximately 12 miles in length within the cities of Lafayette and Walnut Creek, and the town of Moraga. Land within the Project footprint is owned by the Golden Rain Foundation, Saint Mary's College, private landowners, and public utilities, including PG&E and the East Bay Municipal Utility District (EBMUD). Communities included within the proposed shaded fuel break and WUI fuel reduction zone are Walnut Creek, Lafayette, and Moraga.

The Project is divided into two phases: a shaded fuel break and a connecting shaded fuel break to the Tunnel East Bay Hills Shaded Fuel Break, which is being implemented by the Moraga-Orinda Fire District. Phase I of the Project is approximately 10 linear miles starting in the northeast in Walnut Creek, Contra Costa County from Rossmoor Parkway and Tice Valley Road, extending south and around Horseman's Canyon Drive for approximately 3.2 miles, then extending north approximately 3.5 miles to the northern end of Skycrest Drive. An approximately 3.3-mile western extension from Morecroft Road on the south continues along Hunsaker Canyon Drive across a small stretch of open space. Phase II of the Project connects the Project to MOFD's Tunnel East Bay Hills Shaded Fuel Break. This section unites with the shaded fuel break in open space and continues south to Valley Hill Drive, then extends north from Valley Hill Drive for approximately 2 miles to Saint Mary's College on Bollinger Canyon Road.

While the Project footprint includes 51 acres of land mapped as treatable landscape by the CalVTP, it also includes 248 acres not included in the CalVTP treatable landscape (Figure 3). Treatment types and treatment activities would be consistent throughout the Project footprint regardless of whether it has been mapped as treatable landscape. Treatment types and activities would be contingent upon-site conditions, accessibility, and fuels management needs to achieve the shaded fuel break. This Project proposes two treatment types consistent with the CalVTP PEIR: fuel breaks and WUI fuel reduction. The Project's proposed treatment activities would be consistent with those described in the CalVTP PEIR: manual treatment, mechanical treatment, prescribed burning (broadcast and pile), prescribed herbivory, and herbicide (spot treatment).

The Project footprint and surrounding area have a wildfire hazard risk, which is considered by CAL FIRE to be "high" to "very high." Wildfire hazard risk is attributed to widespread invasive, noxious, fire-hazardous vegetation; decades of dead vegetation accumulation; over a century of fire suppression; and the increased risk of anthropogenic ignition associated with dense urban development (CAL FIRE 2023). The desired result of the Project is to restore fuel loads to more natural levels that can be maintained through prescribed fire and other methods. The Project would reduce excess and ladder fuels within an approximately 100-foot-wide shaded fuel break and WUI (up to 300 feet wide in some areas).

The Project follows a route throughout the landscape that supports a strategic approach to wildfires in the WUI. Project implementation would not stop fire spread during periods of strong, warm, downslope winds with low relative humidity (i.e., Foehn winds) when pieces of burning material can be blown across fuel breaks. However, the Project would provide a point from which firefighting resources can "anchor" to conduct suppression activities, and it would increase the construction rate of fire lines while simultaneously reducing the amount of air-delivered fire retardant required to coat vegetation effectively. Slowing down the spread of wildfire would provide additional time for an effective community evacuation.

Uncontrolled wildfire is associated with environmental degradation impacts such as increased greenhouse gas (GHG) emissions and habitat loss. This Project would reduce dangerous wildfire fuels in a deliberate manner designed to minimize environmental impacts to wildlife and protected plants. Treatment types and activities described in the CalVTP aim to mimic conditions that exist in a natural environment where natural fires would have occurred. Strategic fuel removal would concentrate on areas of high fuel concentrations and disrupt the horizontal and vertical continuity of fuelbeds. Biological diversity in the area would be maintained by promoting conditions that favor native plant and animal species. Forest health would be improved through enhancing native, fire-resilient plant communities, primarily through ladder fuel and weed removal, opening space for native plants to return. Healthy mature trees and scrub dominating the canopy would be thinned out and retained, reducing new brush and understory growth while preserving the carbon sequestration function. Biomass would be strategically diminished in open grassy areas.

In addition to the Project treatment types and activities being consistent with the CalVTP, the CCCFPD follows CAL FIRE's best management practices (BMPs), which include identifying and avoiding sensitive resources to ensure environmental protection when designing and constructing fuels reduction projects. The Diablo FireSafe Council compiled the "Best Management Practices Guidebook for Hazardous Fuel Treatments in Contra Costa County" (March 2009). This document examines and describes fuels management strategies to avoid impacts to sensitive resources. Implementation of these BMPs in combination with the CalVTP's SPRs and MMs would protect lives, property, and natural resources while implementing fuels reduction activities.

## 2.1 Treatment Types

The proposed Project would utilize two treatment types in combination to create a linear break for firefighting resources to contain or stop a fire: WUI fuel reduction and fuel break. Strategic placement of the WUI fuel break would be based upon the prevailing vegetation types, topographic characteristics, environmental considerations, and surrounding land uses. Fuels in the Project area are primarily heavy loads of oak, pine, coyote brush, sage, and grass; the general topography is steep with difficult access. Residential homes adjacent to the Project are primarily moderate to very large (2,000 to 15,000 square feet) in size on moderate to large lots with densely intermixed vegetation. Low-income and multi-family housing are also prevalent along portions of the shaded fuel break.

The placement of the Project considered downwind areas with an active fire history that currently have inadequate evacuation routes. In many areas, ingress and egress to portions of the impacted communities are limited to a single roadway. Existing access roads are typically steep, and driveways are long in many areas. Dead ends and few turnarounds further amplify the fire risk through delays in firefighting response and extended evacuation times. In some areas, water supply for fire suppression is also limited. These conditions impact both the evacuation of at-risk portions of the community and fire suppression response. Based on a risk analysis, this Project would treat hazardous fuels in the communities at greatest risk to ensure the highest return-on-investment. The Project would use a "light touch" approach with an emphasis on ladder fuel reduction adjacent to existing fire trails and roads. This approach would minimize soil disturbance, maximize production rates, and limit the impact to special-status species of both flora and fauna.

WUI and shaded fuel breaks are defined in the sections below, and they would be used in combination. Creation of the combined WUI shaded fuel break would strategically use several treatment activities based on the prevailing vegetation types, topographic characteristics, environmental considerations, and surrounding land uses. Work would be completed with minimal to no disturbance to the ground and remaining vegetation. Treatment activities by fuel type are described in more detail in Section 2.3.

### *2.1.1 Wildland-Urban Interface Fuel Reduction*

WUI fuel reduction involves strategic removal of vegetation to prevent or slow the spread of non-wind-driven wildfire between structures and wildlands. In areas where wildland and manmade structures overlap, higher intensity fuel reduction typical of defensible space would occur within 100 to 150 feet of manmade structures, as determined by fire professionals, and based on-site conditions. Beyond 100 to 150 feet from manmade structures, vegetation treatments would be implemented with lower intensity. Fuel reduction would focus primarily on removal of fire hazardous vegetation such as dead, and dying, and diseased vegetation including trees; invasive plants and noxious weeds; and limbing up of healthy trees.

### *2.1.2 Fuel Breaks*

Fuel breaks give firefighters access to control wildfires and are useful in slowing fires before they grow beyond initial attack capabilities. Fuel breaks permit responders to reach the leading edges of a fire and protect isolated communities, and fuel breaks can stop or reduce the lateral spread of fires. In heavily wooded areas, a shaded fuel break would be implemented; the retained canopy shade would slow future growth of many grass and brush species and assist in future maintenance efforts. In suitable Alameda whipsnake habitat, a "scrub island" strategy would be implemented to retain habitat function; this is discussed in more detail in later sections. Development and maintenance of a fuel reduction zone within a 100-foot-wide fuel break would extend around community structures located adjacent to undeveloped open spaces. Portions of the fuel break would extend up to a width of 400 feet based on topography, site conditions, and land management constraints.

## 2.2 Treatment Activities

Treatment activities to achieve Project objectives would be applied singularly or in combination, depending on site conditions and site-specific goals. The Project's proposed treatment activities are consistent with the CalVTP PEIR (Ascent Environmental 2019) and would include:

- **Prescribed Burning**: Includes broadcast burning (prescribed burning to reduce fuels over a larger area or restore fire resiliency in target fire-adapted plant communities conducted under specific conditions related to fuels, weather, and other variables) and pile burning (prescribed burning of piles of vegetative material to reduce fuel and/or remove biomass following treatment).
- **Mechanical Treatment**: Use of motorized equipment to chip vegetation and to mow select areas.
- **Manual Treatment**: Use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous or woody species.
- **Prescribed Herbivory**: Use of domestic livestock to reduce a target plant population, thereby reducing fire fuels or competition of desired plant species.
- **Herbicides**: Chemical application designed to inhibit growth of target plant species.

### *2.2.1 Prescribed Burning (Broadcast)*

Prescribed understory fires would mimic periodic low intensity wildfires historically prevalent in the region and would create similar structural and habitat conditions that benefit many plant and wildlife species. Gradual reintroduction of fire presents an opportunity to improve forest health, reduce critical fuel loading, improve emergency access, and regenerate a healthy ecosystem. Prescribed low intensity surface fires (broadcast burning) would be used to control vegetation and manage fuel loads. Prescribed burning would remain within a predetermined area and would occur only with specific fuels and in safe weather conditions. Prescribed burns would be used for maintenance of treatments, and they would occur approximately every 5 years as appropriate.

Active burns would follow environmental safety guidelines, including burning only after consideration of specific weather conditions (e.g., appropriate humidity, wind direction, etc.) and coordinating with resource agencies such as the CARB. Specifically, active burns would include the preparation and implementation of a burn plan that would include a smoke management plan (SMP). CCCFPD would report site conditions and request approval to burn through the Prescribed Fire Information Reporting System (PFIRS), which serves as an interface between air quality managers, land management agencies, and individuals that conduct prescribed burning in California. A prescribed burn SMP must be submitted to the Bay Area Air Quality Management District (BAAQMD) at least 30 days prior to burning. Additionally, the SMP must be approved by the Air District prior to burning.

Prescribed burns would typically be ignited using a flamethrower from a side-by-side utility terrain vehicle, by walking with a drip torch or fusee, or other methods as determined by a professional. Prescribed burns are typically completed in a single day, but under certain circumstances could be maintained for up to 1 week. On average, up to 45 workers are present on-site for a prescribed burn. Heavy equipment would typically be operated from an existing road. In anticipation of completely avoiding the federally threatened Alameda whipsnake and minimizing habitat impacts for this species on the Project site, prescribed burning within highly suitable Alameda whipsnake habitat would be restricted to when temperatures are conducive to snake movement, which is typically when soil surface temperatures reach 66 °F (19 °C).

### *2.2.2 Mechanical Treatment*

Mechanical treatments would mow target vegetation with special care to avoid ground disturbance in sensitive habitat. Lawn mowers, or similar, would target vegetation, including standing and downed vegetation. Mechanical treatments would also be employed as a biomass disposal method to chip and broadcast woody debris. Chipping and broadcasting equipment would typically remain on existing roads and fire trails. Mechanical treatment activities would occur predominantly on slopes below 40 percent grade, along ridges, and may occur on slopes greater than 40 percent grade with equipment that can reach target vegetation from existing road infrastructure. No mechanical treatment would occur on slopes above 50 percent grade. Mowing activity would avoid Alameda whipsnake habitat, state or federally jurisdictional waters, and riparian habitat by a no-work buffer, as defined in later sections of this document.

Typical mechanical treatments would require a team with up to 20 workers and equipment such as riding lawn mowers, bucket trucks, tow chippers, and track chippers. Typical mechanical treatments would require several days to several months to complete, depending on the size of the treatment area, steepness of terrain, and type and density of vegetation.

### *2.2.3 Manual Treatment*

Ground crews would use hand tools and hand-operated power tools, including chainsaws, hand saws, pole saws, McLeods, Pulaskis, weed pullers, weed eaters (e.g., string, plastic blades, or circular blades), brush cutters, and loppers to cut, clear, and/or prune trees, herbaceous vegetation, and woody shrubs. Where feasible, treatments would prioritize removal of invasive plants and noxious weeds. Within suitable Alameda whipsnake scrub habitat, hand-removal would prioritize removal of dead woody vegetation, dead branches, and invasive weeds. Manual treatment activities would avoid state or federally jurisdictional waters and riparian habitat by a standard buffer, as described in a later section.

Manual treatments within the Project area would require several days to several months to complete, depending on the size of the treatment area, steepness of terrain, and type and density of vegetation. Manual treatment typically clears 0.3 acre or more per day, per team. Manual treatments typically require 1 or 2 hand crew teams with a total of 20 to 40 crew members to be present on-site.

### *2.2.4 Prescribed Herbivory*

Prescribed herbivory involves transporting, releasing, herding, and moving grazing animals such as cattle, sheep, goats, or horses to designated sites. Herds would be installed strategically within areas with wildlife-safe fencing and with a professional shepherd who would coordinate animal movements to prevent excessive grazing and ground disturbance. Moving livestock from one grazing ground to another would occur at a frequency based on numerous site-specific factors, including slope, density and type of vegetation, stocking rate, type of livestock, and precipitation/ moisture content of vegetation. Stocking rate would vary based on species of grazer (e.g., a herd of cattle would require a larger acreage than a herd of goats of the same size). Site conditions (e.g., relative density or quantity of the vegetation to be treated, etc.) would determine herd size and the grazing time to complete the job.

Prescribed herbivory would require temporary wildlife-safe fencing where natural barriers are not present, temporary water facilities and other infrastructure (e.g., corrals, fences), and guard animals and/or a shepherd to be present on-site. Any areas identified as sensitive to grazing activity would be clearly marked on Project maps, and protection measures would be communicated to the herder and project manager, including a pre-vegetation removal field visit, as appropriate.

To prevent undesirable introduction of invasive or noxious plant species to the site, consideration would be given to where animals are coming from and whether viable seeds of undesirable species are present. As necessary, the herd would be fed a weed-free diet for an appropriate period prior to being introduced to the grazing site. Any supplemental feed brought on-site would be free of noxious weeds.

### *2.2.5 Herbicide Application*

Herbicides would be used strategically to supplement other treatment methods to prevent the spread and resprouting of invasive species within the treatment areas and along roads. Effective herbicides identified by the California Invasive Plant Council (Cal-IPC) and US Department of Agriculture that are consistent with those described in the CalVTP PEIR (e.g., glyphosate and species-specific chemicals) would be applied. On-the-ground application methods include painting cut stems or stumps and using backpack hand applicators targeted on focal invasive plants; no aerial spraying or spraying from trucks would occur. No herbicide used would occur within 30 feet of aquatic habitat except for direct application to freshly cut invasive tree stumps.

Herbicide application would comply with the US Environmental Protection Agency (EPA) label directions and both California Environmental Protection Agency (CalEPA) and California Department of Pesticide Regulation label standards. All herbicide application would be performed by certified and licensed pesticide applicators in accordance with all local, state, and federal regulations. Herbicide application would not take place within 24 hours of a rain event.

### *2.2.6 Biomass Disposal*

The goal of biomass disposal is to reduce ignitable material and associated air quality impacts from wildfire, reduce brood material for harmful insects and disease, and enhance aesthetics. By reducing the available fuel in the shaded fuel break, the fuel continuity is disrupted, which slows down the spread of wildfires and decreases potential fire intensity.

Methods for managing biomass include natural decomposition (e.g., chip and broadcast, lop and scatter), hauling off-site, and pile burning. Downed woody debris may be masticated where it creates a fire hazard. To mitigate brood stratum opportunities for beetles, downed logs would not be left on-site in accordance with California Forest Practice Rules (CAL FIRE 2019) and BMPs. Whenever feasible, natural decomposition of biomass would be preferred because: (1) forestry mulch aids in mitigating erosion and excessive soil disturbance; (2) keeping material on-site prevents the spread of disease and pathogens to other sites, with Sudden Oak Death (SOD; *Phytophthora ramorum*) being of particular concern in our region; and (3) GHG emissions are reduced by avoiding the transportation of material off-site to green waste facilities. For all these reasons, the most climate-friendly option is to leave woody biomass on-site to decompose naturally.

**Natural Decomposition**

Cut vegetation may be retained on-site to decompose naturally via lopping and scattering or chipping and broadcasting across the landscape. Lopping plants involves cutting a plant low to the ground and distributing the cut material. In some cases, a road-based chipper or an all-terrain vehicle and tracked towable chipper would be used to process cut vegetative materials. The vegetative material would be fed through the chipper and broadcast widely into treatment areas. Biomass would be chipped to 3 inches or smaller in size and spread up to 4 inches deep. Cut vegetation and chips would not be placed below the ordinary high water mark of aquatic features, within wetlands or riparian areas, or on top of burrows or rock piles. Understory debris chipped and scattered on-site would follow BMPs for reducing the spread of pests, disease, noxious weeds, and invasive species (see Section 2.5).

**Hauling Off-Site**

Vegetation moved off-site would be hauled to the Central Contra Costa Solid Waste Authority or another appropriate biomass processing facility. Transported invasive plant materials would be stored in a closed container to prevent spreading during transport.

**Pile Burning**

Hand-cut material would be piled as “feeder piles,” with the cut stems facing in one direction in a manner to minimize any overstory scorch when the piles are restacked and burned. Most of the piles would be built in open areas of the forest floor or on the roadside. Suitable areas for pile burning are open areas away from tree canopies and power lines. Sites suitable for pile burning would depend on

location of sensitive species habitat and safety guidelines (e.g., humidity, wind direction, etc.). General operations for pile burning would follow these guidelines:

- Multiple piles would be burned on a single day.
- Pile size would not exceed 20 feet in diameter.
- Piles would not block vehicle access on any road or trail.
- Piles created within suitable Alameda whipsnake habitat and left for any significant period of time will be dismantled and re-piled prior to igniting.

Pile burning would be conducted in compliance with the local authority having jurisdiction or the CAL FIRE and BAAQMD Regulation 5 for open burning and burn day restrictions. Burns would be coordinated with appropriate resource agencies (e.g., CARB) and would follow a burn plan that includes a smoke management plan. CCCFPD would report site conditions and request approval to burn through PFIRS, which serves as an interface between air quality managers, land management agencies, and individuals that conduct prescribed burning in California.

## 2.3 Treatment Prescriptions by Fuel Type

The Project is divided into two distinct operations: removal of ladder and ground fuels; and removal of ground fuels such as dead, dying, diseased, and downed vegetation, branches, and trees. Both operations would manage excess ladder and ground fuels through a combination of treatment activities, including manual, mechanical, prescribed burning, prescribed herbivory, and herbicide spot-treatment. Resulting biomass would be pile burned, left to decompose naturally, or hauled off-site.

### *2.3.1 Ladder and Ground Fuel Removal*

#### *2.3.1.1 Fire Trails and Roads*

Ladder and ground fuels along fire trails and roads would be managed at a distance of twice the flame length indicated by the prevailing fuel model for that area. This distance would ensure the effectiveness of fire trails and roads in slowing or stopping a fire's spread during Diablo wind conditions. Trailside and roadside fuel reduction areas would provide an anchor point from which fire suppression resources would engage wildfires.

Treatment activities along fire trails and roads follow a combination of mowing and other similar mechanical means, hand crew trimming and thinning, prescribed grazing, prescribed burning, and spot herbicide treatment. The prescription would remove ladder fuels, remove or pile leaf litter and duff for pile burning, thin or remove dense brush, and trim low hanging branches within 6 feet of the ground or a height appropriate as deemed by a professional to reach site goals. Annual grass and herbaceous weeds would be mowed or grazed to less than approximately 6 inches by cattle or goats, or a height appropriate to reduce fire risk and maintain habitat function as deemed by a professional.

**Off-Trail and Off-Road**

Beyond twice the flame length of trails/roadsides, excess ladder and ground fuel would be removed by hand crews, chippers, and mowing.

### *2.3.2 Dead, Dying, Diseased, and Downed Trees*

The second operation would remove all dead, dying, diseased, and downed vegetation, branches and trees presenting a fuel hazard, as determined by a Registered Professional Forester (RPF). Biomass would be hauled off-site or chipped and scattered on-site dependent on size, health of tree, and access to the biomass. Downed trees would be removed or piled for winter burning.

### *2.3.3 Habitat-Specific Prescriptions*

Traditional fuel reduction methods adopt treatment activities that are typically determined by fuel type. Vegetation types for proposed treatment within the Project footprint are a mosaic of blue and coastal oak woodland, coastal scrub, and annual grasslands. One other California Wildlife Habitat Relationship (CWHR) classification system vegetation type found on the Project site is urban, which corresponds primarily to roads. Treatment strategies are a combination of treatment activities broadly described for each vegetation type. The treatment approach would generally follow these basic guidelines:

- Prioritize removal of invasive plants and dead woody material while retaining live native vegetation.
- Hazardous trees (e.g., dead or dying trees) identified by a RPF or qualified fire professional would be removed.
- Tree canopy would be retained to the greatest extent feasible while removing ladder fuels.
    - Large trees (greater than approximately 6 inches in diameter at breast height [DBH]) would be limbed up to approximately 6 feet or as determined by a professional.
    - Small trees and brush (less than approximately 6 inches DBH) would be removed strategically, cutting stumps to within 4 inches of bare mineral soil.
    - Small trees and large shrubs in open areas that have the potential to provide shade and reduce invasive plant species would be limbed up to approximately 6 feet, or as deemed by a professional, and the canopy would be left intact.
    - Tree canopy over emergency access roads would be trimmed up to approximately 15 feet from the ground, or as deemed by a professional based on site goals, to facilitate passage of emergency vehicles during a fire event.
- No commercial forest products would be removed.

#### *2.3.3.1 Grass Fuel Type Treatment Activities*

Grass fuel type would include habitat classified as annual grassland by the CWHR. Within non-native grassland, treatment activities would cut grasses to a maximum of approximately 6 inches, achieve horizontal spacing, and reduce overall fuel loading. Prescribed herbivory, mowing, prescribed burning, and herbicide spot treatment would be strategically combined grass- and herb-dominated areas and in areas of shrub encroachment.

**Prescribed Herbivory Treatment**: Goats, cattle, or other grazing animals would be installed strategically within areas with wildlife-safe fencing or other existing barriers. A professional shepherd would coordinate animal movements to prevent excessive grazing and ground disturbance.

**Mechanical Treatment Activities**: Mowing would be performed using riding lawn mowers, or similar, and would not be used within 50 feet of suitable Alameda whipsnake habitat. Appropriate mechanical equipment as determined by a professional would be present during prescribed burning.

**Prescribed Burning Treatment Activities**: Burning would be timed to control invasive non-native grasses where present. Perimeter fire lines would include existing roads and natural features where possible to maintain aesthetic values. Prescribed fires would be conducted in conditions promoting a light to moderate burn (i.e., when soil and duff are moist) to increase the productivity of the habitat without resulting in adverse impacts to wildlife. All prescribed burning (both broadcast and pile burns) would be done under applicable burn and air quality permits to minimize potential environmental impacts. Within suitable Alameda whipsnake habitat, prescribed burning and pile burning would be restricted to times when temperatures are conducive to snake movement, which is typically when soil surface temperatures reach 66 °F (19 °C).

**Manual and Herbicide Treatment Activities**: Crews equipped with hand-tools would trim dead, dying branches from native shrubs occurring within grassland. Small, isolated trees (6 inches or smaller DBH) growing in the grassland would be cut and piled for burning. Larger trees encroaching on or distributed throughout grasslands would be limbed up to reduce vertical fuel continuity. Cut vegetation would be lopped and scattered, chipped and broadcast, pile burned, or hauled off-site. Invasive shrubs and noxious weeds encountered in the grasslands would be treated with the appropriate method for the species and life stage. Herbicide spot treatment would target invasive species and would be applied by hand or targeted by backpack sprayer.

**Biomass Disposal**: Biomass from non-invasive, non-noxious plants would be left to naturally decompose (e.g., lop and scatter, chip and broadcast), pile burned, or hauled off-site. Poison oak would be cut and left in place (lop and scatter). Where chipper access is not practical, cut material would be piled strategically for later burning. Within suitable habitat for Alameda whipsnake, piles left in place for a critical length of time as determined by a professional would be dismantled and reconstructed prior to burning.

#### *2.3.3.2 Shrub Fuel Type Treatment Activities*

Shrub fuel type would include habitat classified by the CWHR as coastal scrub. The general approach in suitable Alameda whipsnake scrub habitat would be to strategically reduce hazardous fuels in a way that retains scrub habitat. Selective removal of invasive species and dead, woody vegetation and limbs would retain scrub habitat characteristics suitable for Alameda whipsnake with a mosaic of open and closed canopy patches. The resulting patches would be irregular, oblong shapes to maintain a natural condition and retaining rocky outcrops through avoidance. Scrub patch characteristics would model naturally occurring scrub and would include variable age classes. Treatment activities within suitable Alameda whipsnake habitat would involve primarily manual thinning to remove dead woody vegetation and invasive species to achieve horizontal spacing. Other treatment activities in shrub fuel types would include prescribed herbivory in shrubby areas with interspersed grasses and areas adjacent to grasslands being grazed. Vegetation removal activities would retain scrub and the overall dominant scrub habitat type would not be converted to a different habitat type.

Specifications for suitable Alameda whipsnake habitat are described by the US Fish and Wildlife Service (USFWS): coastal scrub, coyote brush scrub, or maritime chaparral areas greater than 0.5 acre in size, or scrub areas greater than 0.2 acre in size that are within 50 feet of scrub patches greater than 0.5 acre in size (Federal Emergency Management Agency [FEMA] 2013). Scrub islands created through mosaic thinning or patch retention thinning would result in a total canopy cover of between 30 and 50 percent shrubs and 50 to 70 percent grassy openings (FEMA 2013). Scrub retained in these dimensions also retains the overall habitat function for Alameda whipsnake while still serving the needs of the shaded fuel break.

**Manual and Herbicide Treatment Activities**: Scrub would be retained in a natural mosaic through the removal of invasive species, thinning out dead branches from shrubs, and limbing up large shrubs. Small encroaching trees (under 6 inches DBH) may be removed, and limbs would be removed from larger trees up to 6 feet, as appropriate. Cut vegetation would be lopped and scattered, chipped and broadcast, pile burned, or hauled off-site. Broom plants or other invasive shrubs and noxious weeds would either be uprooted and pulled or cut low to the ground and spot treated with herbicide. Herbicide spot treatment of invasive species and noxious weeds would be hand applied.

**Prescribed Herbivory Treatment**: Goats, cattle, or other grazing animals would be installed strategically within areas with wildlife-safe fencing or existing barriers. A professional shepherd would coordinate animal movements to prevent excessive grazing and ground disturbance.

**Biomass Disposal**: Biomass from non-invasive, non-noxious plants would be left to naturally decompose (e.g., lop and scatter, chip and broadcast), pile burned, or hauled off-site. Poison oak would be cut and left in place (lop and scatter). Where chipper access is not practical, cut material would be piled strategically for later burning. Within suitable habitat for Alameda whipsnake, piles left in place for a

critical length of time as determined by a professional would be dismantled and reconstructed prior to burning.

#### *2.3.3.3 Tree Fuel Type Treatment Activities*

Tree fuel types would include habitat classified by the CWHR as blue oak woodland and coastal oak woodland. The general approach to tree fuel types would be designed to prevent fire from approaching or departing the fuel break, prevent fire from laddering into the tree canopy, and would promote establishment of native trees. Selective thinning would result in a shaded fuel break that retains the tree canopy. This would be achieved through removal of select trees, branches, shrubs, and both living and dead vegetation that could facilitate the upward spread of fire from surface fuels to the forest canopy. The shade of the retained canopy would reduce the potential for rapid re-growth of understory, and the selectively treated areas would provide firefighters an opportunity to access lower intensity ground fires should they occur. Within all wooded areas, vegetation removal would be addressed primarily with manual treatment activities to preserve a natural appearance. Other treatment activities used within forest fuel types would include mechanical equipment, herbicides, prescribed herbivory, and prescribed burning.

**Manual Treatment Activities**: Hand-held tools would remove and thin understory shrubs and brush, as well as dead and dying trees and small (less than 6 inches DBH) non-native, invasive trees. Lower tree limbs would be pruned, and most ground vegetation would be removed to break up the horizontal and vertical continuity of flammable vegetation. Invasive species and noxious weeds would be strategically removed first followed by fire prone native species such as oak (*Quercus* spp.), pine (*Pinus* spp.), coffee berry (*Frangula* spp.), sage (*Artemisia* spp.), etc. Native trees would be strategically retained in forested areas with 25 to 50 feet of space between crowns, where the tree crown is approximately 10 to 15 feet wide. Spacing may be closer than 25 feet on level ground as needed, and greater than 50 feet on steeper ground to mitigate wildfire behavior or near structures for structure protection.

**Mechanical Treatment Activities**: Mowing would be performed to remove hazardous fuels in the understory using riding lawn mowers, or similar, and would not be used within 50 feet of suitable Alameda whipsnake scrub habitat. Mechanical equipment would be used to chip and scatter biomass from stable operating surfaces.

**Herbicide Treatment**: Invasive species and noxious weeds cut low to the ground may be hand-painted with herbicide.

**Prescribed Herbivory Treatment**: Goats, cattle, or other grazing animals would be installed strategically within areas with wildlife-safe fencing or existing barriers. A professional shepherd would coordinate animal movements to prevent excessive grazing and ground disturbance.

**Biomass Disposal**: Biomass from non-invasive, non-noxious plants would be left to naturally decompose (e.g., lop and scatter, chip and broadcast), pile burned, or hauled off-site. Poison oak would be cut and

left in place (lop and scatter). Where chipper access is not practical, cut material would be piled strategically for later burning.

#### *2.3.3.4 Riparian Habitat and Watercourses*

All treatment activities and biomass distribution would avoid wetland, riverine, and other aquatic features by a standard minimum 25-foot buffer, which would be increased based on recommendations of a qualified biologist or RPF and/or factors such as slope, existing erosion, sensitivity of the vegetative habitat, or presence of sensitive resources. Refueling of equipment would occur outside these buffers and would be performed using containment to mitigate the risk of spills.

## 2.4 General

### *2.4.1 Timing of Initial Treatment*

CCCFPD would commence initial fuel treatment within the Project footprint in January 2024 and would complete the work by the end of 2025.

### *2.4.2 Workers*

CCCFPD, Crew 12, CAL FIRE crews, and/or subcontractors would conduct all treatment activities. Crew team sizes would vary and would typically be fewer than 25 workers per site, per day. Multiple teams would work at the same time.

### *2.4.3 Site Access*

Treatment areas would be accessed via existing fire roads and trails. No new roads or access points would be created. Private residences would be used as access points, contingent upon the landowner's consent. Vehicles and equipment would be staged at the contractor's yard daily or on-site with landowner consent.

### *2.4.4 Treatment Schedule and Duration*

Treatments except herbivory would occur primarily on weekdays during daylight hours only. During prescribed burning, crews would need to conduct some maintenance burning on weekends to manage overall smoke impacts. Noise-generating treatments would comply with the local regulations outlined in Table 1 below.

**Table 1.** Relevant Local Jurisdiction Noise Restrictions.

| Jurisdictional Noise Restriction | Restrictions |
|---|---|
| Contra Costa County Noise Element | Construction activities shall be concentrated during the hours of the day that are not noise sensitive for adjacent land uses and should be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods. |
| Contra Costa County Ordinances | No person may own, possess, harbor, control, or keep on any premises, a barking dog or other noisy animal. "Noisy animal" means an animal that makes any noise for an extended period of time to the disturbance of any person at any time of day or night, regardless of whether the animal is physically situated in or upon private property. An ''extended period of time" means incessant noise for thirty minutes or more in any twenty-four-hour period, or intermittent noise for sixty minutes or more in any twenty-four-hour period. (Section 416-12.202) |
| City of Lafayette Noise Ordinance | Construction may occur between 7 a.m. and 10 p.m. on weekdays if below 50 dBA at adjacent land uses. Power equipment may be used between 7 a.m. and 10 p.m. if below 50 dBA at adjacent land uses. Between 8 a.m. and 8 p.m. on weekdays and 10 a.m. and 6 p.m. on weekends construction activities are allowed if no individual piece of equipment produces a noise level exceeding 83 dBA at a distance of 50 feet or if the noise level at the nearest affected property would not exceed 80 dBA. Emergency work is exempt from the provisions of the noise ordinance.<br>Except as may otherwise be provided in this chapter, it shall be unlawful for any person to do, or cause to be done, any of the following prohibited acts:<br>Animals and Birds. Owning, possessing, or harboring any animal or bird which frequently or for long duration howls, barks, meows, squawks or makes other sounds which create a noise disturbance across a residential or commercial real property line. (Section 5-207) |
| Moraga Municipal Code | It is unlawful except in case of emergency work for a person within a residential zone or within a radius of five hundred (500) feet of one to operate equipment or perform outside construction or repair work on a building, structure or project, or to operate a pile driver, power shovel, pneumatic hammer, derrick, power hoist or other construction type device (between the hours of five p.m. of one day and eight a.m. of the next day) in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance. It is unlawful for a person to operate machinery, equipment, pump, fan, air-conditioning apparatus, or similar mechanical device which disturbs the peace, quiet and comfort of neighboring residents or a reasonable person of normal sensitiveness residing in the area in the quiet and peaceful enjoyment of his property. (Section 7.12.090).<br>No person shall keep or maintain or permit the keeping of an animal or fowl upon premises owned, occupied or controlled by him or her which is otherwise permitted to |

| Jurisdictional Noise Restriction | Restrictions |
|---|---|
| | be kept if by any sound, cry or behavior the animal or fowl causes annoyance or discomfort to a reasonable person of normal sensitiveness in a residential neighborhood in the quiet and peaceful enjoyment of his property. (Section 7.12.070). |
| City of Walnut Creek Noise Ordinance | Construction activities that require building or grading permits are allowed only from 7 a.m. to 6 p.m. on weekdays.<br>Maintenance Equipment. The use and operation of any noise-creating commercial or residential landscaping or home maintenance equipment or tools including, but not limited to, hammers, blowers, trimmers, mowers, chainsaws, power fans or any engine, the operation of which causes noise due to the explosion of operating gases or fluids, other than between the hours of 8:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 7:00 p.m. on weekends and holidays. Businesses and individuals using maintenance equipment in the Core Area and in business parks may commence at 7:00 a.m. on weekdays which are not holidays but are otherwise subject to the limitations set forth above.<br>4-6.203 Prohibited Noises Enumerated.<br>As used in this article, loud, excessive, or unreasonable noise shall include, but not be limited to, the following:<br>e. Animals, Birds, etc. The keeping of any animal or bird, as pet or livestock, which, by causing frequent or continuous noise disturbs the comfort or repose of any persons in the vicinity. The creation or maintenance of noise by animals in such a manner as to be plainly audible at a distance of 50' (fifty feet) from the source of such noise shall be prima facie evidence of a violation of this Section.<br>f. Construction or Repair of Buildings. The erection, construction, demolition, alteration or repair of any building, structure or residence that requires a permit, or the excavation of any earth, fill, streets, or highways that requires a grading permit, other than between the hours of 7:00 a.m. and 6:00 p.m. on weekdays which are not holidays, or those precise hours of operation enumerated in individual building and grading permits. |
| Rossmoor contractor work guidelines | Work may occur between the hours of 8:00 a.m. to 4:30 p.m. |

## 2.5 Pests, Diseases, and Invasive Species

Without proper prevention, Project treatments have potential to spread pathogens, diseases, pests, or invasive species. SOD, pitch canker (*Fusarium circinatum*), yellow starthistle, French broom (*Genista monspessulana*), and snake fungal disease (*Ophidiomyces ophiodiicola*) occur in the region and have potential to spread in the Project area from one work area to another, or from the Project area to off-

site areas. The goal of reducing invasive plant species within the Project area is in conformity with the overall Project goals of fuels reduction and wildfire prevention. Invasive plants can be spread when crews and equipment travel between sites, transporting soil and mud contaminated with seeds.

### *2.5.1 Sudden Oak Death*

SOD infects coastal forests throughout California and Oregon and kills susceptible species including valley oak (*Quercus lobata*), coast live oak (*Q. agrifolia*), California black oak (*Q. kelloggii*), canyon live oak (*Q. chrysolepis*), and Pacific madrone (*Arbutus menziesii*) saplings. Host species that are in the treatment area include California bay laurel (*Umbellularia californica*) and coast redwood (*Sequoia sempervirens*). To avoid the spread of this pathogen, all hand equipment and boots worn by treatment crews would be sanitized and heavy equipment hosed off prior to operations in areas where the spread of SOD is possible. The California Oak Mortality Task Force offers additional information regarding treatment and disposal measures for plants infected with SOD, which would be monitored for changes in SOD treatment recommendations (California Oak Mortality Task Force 2023).

### *2.5.2 Pitch Canker*

The fungal disease commonly referred to as pitch canker affects many pine species and can infect Monterey pine (*Pinus radiata*). Most California native pines are susceptible to pitch canker, but Monterey pine is the most widely affected host. To avoid the spread of this pathogen, the same measures described above to prevent the spread of SOD would be implemented. The Pitch Canker Task Force offers additional information regarding treatment and guidelines for handling woody material infected by pitch canker fungus, which would be monitored for recommendation changes (Pitch Canker Task Force 2023).

### *2.5.3 Yellow Starthistle*

Yellow starthistle is an annual that germinates in February and March and matures in June and July. It produces viable seeds at late senescence of the flower head, and it is therefore vital to control before that point. Management would strategically combine chemical, manual, and mechanical (mowing) for removal. Physical methods should focus on reducing seed production and preventing seed germination. Methods for yellow starthistle removal would be based on treatments described by the Cal-IPC. Effective and common treatment methods for yellow starthistle include mowing and focused herbicide application, but other methods may be used as determined by a professional.

### *2.5.4 French Broom*

French broom is a particularly ignitable invasive species known for its ability to shade out seedlings, replace native plant species, and carry fire into tree canopies. This species creates a large seed bank and readily resprouts from the root after cutting, freezing, or fire (Cal-IPC 2020). Removal of French broom is a priority, as the species presents increased fire hazard, has a robust seedbank, and causes adverse

impacts to habitat and aesthetics. Methods for French broom removal would be based on treatments described by the Cal-IPC. Effective and common treatment methods for French broom include pulling and focused herbicide application, but other methods may be used as determined by a professional.

### *2.5.5 Snake Fungal Disease*

Snake fungal disease comes from a fungus that lives in the soil. This disease causes face abnormalities, scabs, abnormal molting, and other issues as the fungus consumes keratin in the scales (Thompson, Lankau, and Rogall 2018). Symptoms are typically mild but can be fatal, as they may prevent snakes from locating and consuming prey. Snakes, such as the federally and state threatened Alameda whipsnake, are susceptible to this disease. Spread of the fungus to new locations may occur when people track contaminated soil embedded in clothing, shoes, or equipment. In addition to applicable CalVTP SPRs and MMs, the measures described to prevent the spread of SOD would be implemented.

## 2.6 Treatment Maintenance

CCCFPD would monitor the treated areas for maintenance of desired vegetation conditions ("treatment maintenance," per the CalVTP PEIR). CCCFPD would work with homeowner associations, Firewise USA Neighborhoods, and high-risk neighborhoods to identify areas for priority in treatment maintenance to ensure that the defensible space is maintained for maximum benefit. Timing between maintenance activities would vary by habitat type, changing site condition, and as determined by a professional. In forested areas, treatment maintenance may occur every 3 to 5 years. In brush-dominated areas, treatment maintenance such as herbivory may occur every 1 to 5 years. In grassland areas or areas where initial treatments were primarily manual, treatment maintenance may occur annually.

Maintenance treatments are anticipated to follow the same methods as initial treatments but are subject to change depending on site response to initial treatment. For example, at locations where intensive vegetation removal (e.g., prescribed burning) occurred, treatment maintenance may use more low intensity manual treatment activities in subsequent years. Because vegetation communities are dynamic, treatment activities would be modified to reflect changes.

Throughout the treatment maintenance period, CCCFPD would consider the continued relevance of the PSA. Where CCCFPD determines that the PSA is no longer sufficiently relevant, CCCFPD would determine whether a new PSA or other environmental analysis is warranted. If more than 10 years pass since approval of the latest PSA update, CCCFPD would review the PSA for its applicability to current conditions. For example, CCCFPD would conduct a reconnaissance survey to verify that conditions are substantially similar to those anticipated in the PSA. Any updates would be documented.

# 3.0 ENVIRONMENTAL CHECKLIST

## VEGETATION TREATMENT PROJECT INFORMATION

1. **Project Title:** Lafayette/Walnut Creek Shaded Fuel Break
2. **CalVTP ID Number:** 2023-36
3. **Project Proponent's Name and Address:** Contra Costa County Fire Protection District
   4005 Port Chicago Hwy, Suite 250
   Concord, CA 94520
4. **Contact Person Information and Phone Number:** Chris Bachman, Assistant Chief/Fire Marshal
   (925) 941-3300
   cbach@cccfpd.org
5. **Project Location:** Contra Costa County: Walnut Creek, Lafayette, Moraga, and other communities and open space
   UTMs: 10S 581596m E 4190403m N
6. **Total Area to Be Treated:** 299 acres
7. **Description of Project:**

The proposed Project would involve conducting fuel reduction vegetation management activities on 299 acres across Walnut Creek, Lafayette, and Moraga, California. See Section 2 for expanded Project Description.

**a. Initial Treatment**

See Section 2 for expanded Project Description.

**Treatment Types**

☒ Wildland-Urban Interface Fuel Reduction

☒ Fuel Break (Shaded)

☐ Ecological Restoration

**Treatment Activities**

Multiple strategies will be utilized to achieve the shaded fuel break and WUI fuel reduction, and therefore the acreage sum below will exceed the actual acreage of the Project area.

☒ Prescribed Burning (Broadcast), approximately 299 acres

☒ Prescribed Burning (Pile Burning), approximately 150 acres

☒ Mechanical Treatment, approximately 299 acres, outside of Alameda whipsnake habitat

☒ Manual Treatment, approximately 299 acres

☒ Prescribed Herbivory, approximately 299 acres

☒ Herbicide Application, approximately 5 acres

**Fuel Type**

☒ Grass Fuel Type

☒ Shrub Fuel Type

☒ Tree Fuel Type

**b. Treatment Maintenance**

Per Section 2.6: Treatment Maintenance, maintenance treatments are anticipated to follow the same methods as initial treatments but are subject to change depending on site response to initial treatment.

**Treatment Types**

☒ Wildland-Urban Interface Fuel Reduction

☒ Fuel Break (Shaded)

☐ Ecological Restoration

**Treatment Activities**

Multiple strategies will be utilized to achieve the shaded fuel break and WUI fuel reduction, and therefore the acreage sum below will exceed the actual acreage of the Project area.

☒ Prescribed Burning (Broadcast), approximately 299 acres

☒ Prescribed Burning (Pile Burning), approximately 150 acres

☒ Mechanical Treatment, approximately 299 acres, outside of Alameda whipsnake habitat

☒ Manual Treatment, approximately 299 acres

☒ Prescribed Herbivory, approximately 299 acres

☒ Herbicide Application, approximately 5 acres

**Fuel Type**

☒ Grass Fuel Type

☒ Shrub Fuel Type

☒ Tree Fuel Type

8. **Regional Setting and Surrounding Land Uses:**

The proposed Lafayette/Walnut Creek Shaded Fuel Break Project would create and maintain a 299-acre reduced fuel zone in the San Francisco East Bay within CCCFPD's service area around the Rossmoor Community in Contra Costa County, California (Figures 1 and 2). The Project will result in the collective protection of over 30,000 residents by creating a shaded fuel break approximately 12 miles in length within the cities of Lafayette and Walnut Creek, and the town of Moraga. Land within the Project footprint is owned by the Golden Rain Foundation, Saint Mary's College, private landowners, and public utilities, including PG&E and EBMUD. Communities included within the proposed shaded fuel break and WUI fuel reduction zone are Walnut Creek, Lafayette, and Moraga.

9. **Other Public Agencies Whose Approval Is Potentially Required (e.g., permits):**

- Pesticide application permit from Contra Costa County Agricultural Commissioner
- Smoke management plan from BAAQMD
- Burn permit from BAAQMD
- Burn permit from CAL FIRE
- Waste discharge requirement from the San Francisco Regional Water Quality Control Board (RWQCB)
- Encroachment permits from local public works departments
- Informal consultation with California Department of Fish and Wildlife (CDFW)
- Informal consultation with USFWS

**Coastal Act Compliance**

☒ The proposed Project is NOT within the Coastal Zone

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

- ☐ A coastal development permit has been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable.
- ☐ The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required.

10. **Native American Consultation:**

For treatment projects that are within the scope of the CalVTP PEIR, Assembly Bill (AB) 52 consultation for AB 52 compliance has been completed. The Board of Forestry and Fire Protection conducted consultation pursuant to Public Resources Code (PRC) Section 21080.3.1 during preparation of the PEIR. For treatment projects with impacts not within the scope of the PEIR,

pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, project partners preparing a new negative declaration, mitigated negative declaration, or EIR must notify any California Native American tribe who has submitted written request for notification of a project in the area of the treatment site. Upon written request for consultation by a tribe, the project partners must begin consultation before the release of the environmental document and must follow the requirements of the cited PRC sections.

Pursuant to CalVTP SPR CUL-2, an updated Native American contact list and sacred lands file search was obtained from the Native American Heritage Commission (NAHC). The sacred lands data file indicated that no sacred sites occur within the Project area or adjacent lands. On August 21, 2023, letters were sent via certified mail to each of the 18 Tribal contacts provided by the NAHC that requested any additional information regarding Tribal resources and to notify CCCFPD if they wished to initiate consultation regarding the Project actions. As of the filing date, no responses have been received. As planning proceeds, CCCFPD would continue to consult with interested Tribal representatives regarding the Project and incorporate their concerns into Project planning and mitigation as warranted.

# DETERMINATION

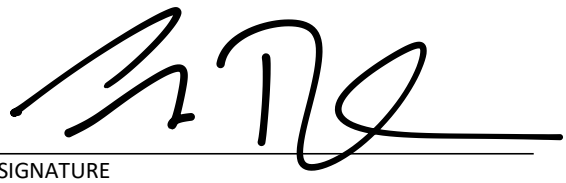
**On the basis of this PSA and the substantial evidence supporting it:**

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

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

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

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



SIGNATURE

1/12/24

DATE

Chris Bachman
PRINTED NAME

Assistant Fire Chief / Fire Marshal
TITLE

Contra Costa County Fire Protection District
AGENCY

# 4.0 PROJECT-SPECIFIC ANALYSIS AND ADDENDUM

## 4.1 Aesthetics and Visual Resources

**Table 2.** Consistency of Project-Related Aesthetics and Visual Resources Impacts with the Scope of the CalVTP PEIR.

| Impact in the PEIR | | | Project-Specific Checklist | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Environmental Impact Covered in the PEIR** | **Identify Impact Significance in the PEIR** | **Identify Location of Impact Analysis in the PEIR** | **Does the Impact Apply to the Treatment Project?** | **List SPRs Applicable to the Treatment Project[1]** | **List MMs Applicable to the Treatment Project[1]** | **Identify Impact Significance for Treatment Project** | **Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?** | **Is this Impact Within the Scope of the PEIR?** |
| **Would the project:** | | | | | | | | |
| Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities | LTS | Impact AES-1, pp. 3.2-16–3.2-19 | Yes | AES-2, AQ-2, AQ-3, REC-1 | 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, REC-1, AES-1, AES-2, 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 | NA | None | NA | NA | NA |

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR 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 PEIR? | ☐ Yes | ☒ No | If yes, complete row(s) below and discussion |

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.1.1 Discussion*

Impact AES-1

The Project would involve manual treatment; ground based mechanical treatment, including skidding, mastication, chipping, and broadcasting; prescribed herbivory; targeted herbicide use; and pile burning and prescribed (broadcast) burning. The potential for these treatment activities to result in short-term degradation of visual character was examined in the PEIR and found to be less than significant.

Portions of the treatment area would be visible from I-680, an officially designated state scenic highway (California Department of Transportation 2019). Additionally, several roads in the vicinity of the treatment areas are locally designated as scenic corridors or routes. Based on analysis of topographic data in ArcGIS Pro, portions of the treatment area would be visible from the following scenic routes: Tice Valley Boulevard, Saint Mary's Road, and Bollinger Canyon Road. Further, the proposed treatments would occur within privately and publicly owned open space areas that contain public hiking trails with views of the treatment areas (City of Lafayette 2013; Town of Moraga, no date (n.d).; City of Walnut Creek, n.d.; Contra Costa County, n.d.; East Bay Regional Park District, n.d.; East Bay Municipal Utility District, n.d.). The visual character in the vicinity of the treatment areas is characterized as recreational/open space areas dominated by grass, shrubs, or trees, as well as residential areas. Viewers in the vicinity of the treatment areas would be mostly residents or recreationalists on existing trails that overlook or are adjacent to the treatment areas, as well as motorists.

Consistent with the PEIR, the presence of large equipment could contrast with the natural environment where publicly visible, such as adjacent to a public trail or roadway. However, a treatment and its visibility would be temporary and would not dominate a view or block any views from scenic vistas or state scenic highways. Smoke from prescribed burning could also be visible from public viewpoints, scenic routes, and I-680. These activities also would not substantially degrade the existing visual character or quality of an area given that the treatment activities would be limited in geographic extent. 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 PEIR because the proposed treatment activities and types of equipment proposed for use are consistent with those analyzed in the PEIR. SPRs applicable to the proposed treatments are AES-2, AQ-2, AQ-3, and REC-1, which require that treatment-related equipment be stored outside of the public viewshed, submittal of a Smoke Management Plan if the prescribed burning triggers the threshold (17 CCR Section 80160), creation of a Burn Plan, and that recreational users be notified of any temporary recreation area closures.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing scenic resources are essentially the same within and outside of the treatable landscape; therefore, the short-term aesthetic impact would also be the same, as described above. The impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AES-2

Initial and maintenance treatments would include shaded fuel break and WUI fuel reduction treatment types. The potential for these treatment types to result in long-term degradation of the visual character of an area was examined in the PEIR and found to be less than significant. Treatments would occur on both public and private lands. Removal of dead or dying vegetation and hazard trees, thinning of shrub dominated areas, and prescribed burning would result in a change in views. The shaded fuel break treatment would retain canopy cover and retain trees larger than 6 inches DBH while limbing up larger trees to 6 feet. Shrub-dominated areas would be thinned through elective removal of invasive species and dead, woody vegetation and limbs. Vegetation removal activities would retain scrub and overall dominant scrub habitat type would not be converted to a different habitat type. These methods would largely preserve the natural appearance. Therefore, these treatments would not substantially affect views.

As described in the PEIR, prescribed burning would result in grasses temporarily changing color from green or brown to a dark gray/black. Grass would regrow during the following winter, so this adverse change would be temporary and short in duration. Additionally, prescribed burning and wildfires occur in this area under existing conditions, so similar burned vegetation is already visible in the vicinity of the treatment areas. Finally, the proposed project would be designed to create a landscape appearance closer to native conditions and could therefore result in long-term beneficial visual impacts.

As described in Impact AES-1, portions of the treatment area are visible from I-680, a state scenic highway, as well as locally designated scenic corridors/routes. Public hiking trails are also present within and adjacent to the treatment areas. The aesthetic impacts would be temporary and short-term, and the natural characteristics of the treatment areas would remain following treatment. SPRs applicable to the proposed treatments are SPRs AES-1, AES-2, and AES-3, and REC-1, which require that treatment-related equipment be stored outside of the public viewshed, treatment area edges are feathered to create a natural transitional appearance, vegetation screening is provided within and adjacent to treatment areas, and recreational users be notified of any temporary recreation area closures. 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 PEIR because the proposed treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing scenic resources are essentially the same within and outside of the treatable landscape; therefore, the short-term aesthetic impact would also be the same, as described above. The impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AES-3

This impact does not apply to the proposed Project because no non-shaded fuel breaks are proposed.

New Aesthetic and Visual Resource Impacts

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The Project proponent has 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 PEIR (per Sections 3.2.1, “Environmental Setting” and 3.2.2, “Regulatory Setting” in Volume II of the Final PEIR). The Project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing environmental conditions pertinent to aesthetics and visual resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts would be the same and, for the reasons described above, impacts of the proposed treatment Project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impact. Therefore, no new impact related to aesthetics and visual resources would occur.

## 4.2 Agriculture and Forestry Resources

**Table 3.** Consistency of Project-Related Agriculture and Forestry Resources Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.2.1 Discussion*

Impact AG-1

The proposed Project would involve manual treatment; mechanical treatment including chipping and mowing, prescribed herbivory, pile burning, prescribed burning (broadcast), and targeted herbicide use; and biomass disposal including lopping, broadcasting, and scattering, hauling off-site, and pile burning. The vegetation communities in the Project area include annual grasslands, coastal scrub, blue oak woodland, and coastal oak woodland. There is no farmland within the Project area. The potential for the proposed treatment to result in the loss of forest land was examined in the PEIR and found to be less than significant. Potential impacts resulting in the conversion of forest land are within the scope of the PEIR as the treatment activities are consistent with those addressed in the PEIR. The creation of the WUI fuel reduction zone and shaded fuel break would employ a treatment approach which generally follows guidelines for the removal of ladder fuels, invasive plants, understory vegetation, and hazard trees, within the vegetation treatment types. The treatment approach would also retain tree canopy to the

greatest extent feasible, including strategic removal, and retaining live native vegetation. Tree cover within woodlands and forested areas remaining after treatment would be consistent with the definition of forest land used in PRC 12220(g): land that can support 10 percent native tree cover of any species under natural conditions. The proposed Project would not remove trees for commercial purposes and would not result in conversion of the dominant vegetation types, therefore the proposed Project would not result in loss of forest land or conversion of forest land to non-forest use. This impact is within the scope of the PEIR because the treatment activities and intensity are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. Within the Project area, existing conditions within forested land are essentially the same within and outside of the treatable landscape. Therefore, the impact to forested land is also the same. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is present within the Project area (California Department of Conservation 2023a); therefore, no conversion of farmland would occur. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Agriculture and Forestry Resource Impacts

Treatments included in the proposed Project are consistent with the treatments and activities that are considered in the CalVTP PEIR. The Project proponent has considered the site-specific characteristics of the proposed Project and determined that they are consistent with the environmental and regulatory settings stated in the CalVTP PEIR (Volume II, Sections 3.3.1 and 3.3.2). The Project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing environmental and regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment Project are also consistent with those covered in the PEIR. No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to agriculture and forestry resources would occur that is not covered in the PEIR.

## 4.3 Air Quality

**Table 4.** Consistency of Project-Related Air Quality Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.3.1 Discussion*

Impact AQ-1

The use of vehicles, mechanical equipment, prescribed herbivory, herbicides, and prescribed burning during initial and maintenance treatments would result in emissions of criteria pollutants that could exceed California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS) thresholds for the San Francisco Bay Area Air Basin. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the PEIR and was found to be potentially significant. Emissions of criteria air pollutants related to the proposed treatment are within the scope of the PEIR because the associated equipment and duration of use are consistent with those analyzed in the PEIR.

The SPRs applicable to this treatment project are AD-1, AD-4, AQ-1 through AQ-4, and AQ-6, which require public notification for prescribed burning, compliance with applicable BAAQMD air quality requirements, submittal of a Smoke Management Plan and Burn Plan if the prescribed burning triggers the threshold (17 CCR Section 80160), minimizing dust, and following all safety procedures required of a CAL FIRE crew. SPR AQ-5 would not apply because no naturally occurring asbestos, ultramafic rock outcrops, or former asbestos mines are mapped in or near the treatment area (McCarten 1993; US Geological Survey [USGS] 2017; USGS 2023; Sequoia 2023). The CCCFPD would implement the emission reduction techniques included in MM AQ-1 to the extent feasible. However, because the treatments would be implemented by a public agency with limited funding, procuring or paying additional amounts for contractors that use equipment meeting the latest efficiency standards, including meeting the US 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 the CCCFPD, but because crews may not all be employed with the same company, carpooling may not be feasible to implement for most of the workers. CCCFPD would document the extent the agency and/or its contractors are able to implement MM AQ-1. Renewable diesel would be used by CCCFPD and/or its contractors to the extent required by state regulations. For these reasons, and as explained in the PEIR, this impact would remain significant and unavoidable. In addition to the CalVTP PEIR SPRs and MMs, additional Project-specific measures are described below each applicable measure.

MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques

- CCCFPD would document the extent that it and/or its contractors are able to implement MM AQ-1 by documenting each unit's certified engine tier specification and applicable CARB fleet regulation compliance certificates prior to mobilization. This information would be compiled in an annual monitoring compliance report for the Project. Renewable diesel would be used by the agency and/or its contractors to the extent required by state regulations.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary

of the Project area, the air quality conditions present and air basin in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AQ-2

The use of vehicles and mechanical equipment during initial and maintenance treatments could expose people to diesel particulate matter emissions. The potential to expose people to diesel particulate matter emissions was examined in the PEIR and found to be less than significant. Diesel particulate matter emissions from the proposed treatments are within the scope of the PEIR because the exposure potential is the same as analyzed in the PEIR, and 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 PEIR. SPRs applicable to this treatment are AQ-1, HAZ-1, NOI-4, and NOI-5, which require complying with air quality regulations, maintaining equipment, locating staging areas away from sensitive receptors, and limiting equipment idling time, respectively.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. The northernmost portion of the Project is located over 1 mile from the nearest treatable landscape. The inclusion of additional land does not impact the duration of treatment activities progress across treatment sites as described in the PEIR and thus diesel PM generated by treatment activities would not take place near any single sensitive receptor for an extended period. However, within the boundary of the Project area, the air quality conditions and types of sensitive receptors (i.e., exposure potential) present in the areas outside the treatable landscape are essentially the same as those within or adjacent to the treatable landscape; therefore, the air quality impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AQ-3

This impact does not apply to the treatment Project, because no naturally occurring asbestos, ultramafic rock outcrops, serpentine soils, or former asbestos mines are mapped in or near the treatment area and no serpentine soils or serpentine outcrops were observed during biological reconnaissance surveys (McCarten 1993; USGS 2017; USGS 2023; Sequoia 2023).

Impact AQ-4

Prescribed burning during initial and maintenance treatments could expose people to toxic air contaminants. The potential to expose people to toxic air contaminants from prescribed burning was examined in the PEIR and found to be potentially significant. The duration and parameters of the prescribed burns are within the scope of the activities addressed in the PEIR, and within the San Francisco Bay Area Air Basin, air quality conditions are consistent with those analyzed in the PEIR for

Contra Costa County. Therefore, the potential for exposure to toxic air contaminants is also within the scope of the PEIR. SPRs applicable to these treatment activities are AD-4, AQ-1, 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, however this impact would remain significant and unavoidable, as explained in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the air quality conditions present and air basin in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AQ-5

The use of vehicles and mechanical equipment during initial and maintenance treatments could expose people to objectionable odors from diesel exhaust. The potential to expose people to objectionable odors from diesel exhaust was examined in the PEIR and found to be less than significant. This impact is within the scope of the PEIR because the exposure potential and the proposed activities, as well as the associated equipment and duration of use, are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are HAZ-1, NOI-4, and NOI-5, which would require equipment maintenance, limiting vehicle idling time to 5 minutes, and notification of off-site sensitive receptors.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the air quality conditions and types of sensitive receptors present in the areas outside the treatable landscape are essentially the same as those within, or adjacent to, the treatable landscape; therefore, the air quality impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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 PEIR and found to be potentially significant. The duration and parameters of the prescribed burn treatment and the exposure potential are consistent with the activities addressed in the PEIR. Therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. SPRs that are applicable to this treatment project are AD-4, AQ-1, 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, however, this impact would remain significant and unavoidable, as explained in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the air quality conditions present and types of sensitive receptors in the areas outside the treatable landscape are essentially the same as those within, or adjacent to, the treatable landscape; therefore, the air quality impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Air Quality Impacts

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The Project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Sections 3.4.1, “Regulatory Setting” and 3.4.2, “Environmental Setting” in Volume II of the Final PEIR). The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR, but the added acreage would not expand the total annual acreage proposed for treatment under the PEIR of 250,000 acres per year. However, within the boundary of the Project area, the existing environmental and regulatory conditions pertinent to air quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they are immediately adjacent to each other, the air basin is the same, and the treatment activities and associated air emissions are the same. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment Project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impact not addressed in the PEIR. No new impact related to air quality would occur that is not covered in the PEIR. Therefore, no new impact related to air quality would occur.

## 4.4 Archaeological, Historical, and Tribal Cultural Resources

**Table 5.** Consistency of Project-Related Archaeological, Historical, and Tribal Cultural Resources Impacts with the Scope of the CalVTP PEIR.

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

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR 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 PEIR? | ☐ Yes | ☒ No | If yes, complete row(s) below and discussion |
|---|---|---|---|

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.4.1 Discussion*

A cultural resources assessment report has been prepared for the Project area, which includes the treatment areas. The methods performed for this report included a background records search consistent with SPR CUL-1, notifications to local Native American representatives consistent with SPR CUL-2, cultural resource research consistent with SPR CUL-3, and a stratified sampling-approach pedestrian survey of the Project area consistent with SPR CUL-4. A record search was requested at the Northwest Information Center (NWIC) to determine whether any portions of the Project area had been previously surveyed for cultural resources and to identify the presence of any previously recorded cultural resources within the Project area, as well as a 0.25-mile buffer (the search radius). The records

search was received on May 23, 2023 (NWIC File No. 22-1765). Other sources of information that were reviewed included, but were not limited to, the current listings of properties on the National Register of Historic Places (NRHP), California Historical Landmarks, California Register of Historical Resources (CRHR), California Points of Historical Interest as listed in the Office of Historic Preservation's (OHP's) Historic Property Directory, and the Built Environment Resource Directory for Contra Costa County (OHP 2020).

As shown below in Table 2, two resources have been previously recorded within the Project area, one of which, P-07-000186—the Rossmoor Site (also known as the Saclan Indian Village Site)—is listed in the CRHR; the additional resource, P-07-004688, has been determined eligible for listing in the CRHR. Another eight resources have been previously recorded within the search radius, in addition to one informally recorded resource; none have been identified as CRHR or NHPA listed historical resources or historic properties.

**Table 6**. Previously Recorded Resources within the Treatment Area and Search Radius.

| Primary No. | Name/Description | Type | Age |
|---|---|---|---|
| **Resources Previously Identified within the Project Area** | | | |
| P-07-000186 | The Rossmoor Site (CA-CCO-309) | Site | Prehistoric |
| P-07-004688 | Contra Costa-Moraga Transmission Line | Structure | Historic |
| **Resources Previously Identified within the Search Radius** | | | |
| P-07-000404 | Carrick Homestead Site | Site | Prehistoric, Historic |
| P-07-000489 | Sacramento Northern Railway | Structure | Historic |
| P-07-000804 | Schmidt House Complex | Building | Historic |
| P-07-002615 | Bruzzoni Property Water Tank | Structure | Historic |
| P-07-002616 | Bruzzoni Property Windmill | Structure | Historic |
| P-07-002617 | Bruzzoni Property Shed | Structure | Historic |
| P-07-002741 | Jewish Community Center Building 1 | Building | Historic |
| P-07-004538 | CHRR-01H | Other | Historic |
| P-07-004689 | Rossmoor Substation | Building | Historic |

One of the previously recorded resources, P-07-004688 or the Contra Costa-Moraga Transmission Line, which was constructed in 1949, was evaluated by Supernowicz (2017) and determined ineligible for the NRHP.

The other resource previously identified within the Project area, P-07-000186 (CA-CCO-309), also known as the Rossmoor Site or the Saclan Village site, was originally recorded by David Fredrickson (1963) and was scientifically investigated at the same time; the site was ultimately listed in the CRHR. An initial data recovery effort of the site followed sometime later due to proposed construction in the area (Bard et al. 1994). It is located along Tice Creek on Rossmoor Parkway, within the northeastern portion of the Project. The site represented a significant habitation location that was initially dated as a Late Period site (occupied from roughly the year 1500 to 1772). However, more recent investigations revealed that the site contained two Early Period buried cultural components at depths of 10 to14 feet that yielded substantial deposits dating from 5,050 to 4,420 years before present, and included numerous burials, ground stones, lithics, and other materials (WSA 2006).

According to the record search results, the boundaries of 24 previous studies intersect the Project area. Of the approximately 300 acres of land within the Project area, about 97 acres have been previously surveyed for cultural resources.

A pedestrian survey was conducted on August 14 and September 8, 2023, by a Montrose Environmental (Montrose) senior archaeologist. Due to the extensive steep topography in the Project area, the survey strategy was stratified to take into account both slope and accessibility from a travel-cost perspective. Specifically, some portions of the Project area that represented slopes of 10 percent or lower, were over 2 acres in area, and were within proximity of a stream or confluence were subjected to more intensive survey techniques (transects of 20 meters or less). Not all areas that represent these flat slopes were surveyed due to their isolation within areas surrounded by steep hillsides. Other areas that represented slopes between 10 and 20 percent were surveyed, based on sensitivity and lack of isolation within steeper areas, using wider intervals of 20 to 40 meters. All other areas were not subject to pedestrian survey due to the steepness of the slopes (>20 percent) or, as mentioned above, were isolated within areas surrounded by steep mountainous areas where the travel costs on foot would minimize the potential for long-term habitation or settlement by prehistoric populations (Byrd et al. 2017).

The location of the Rossmoor Site (CA-CCO-309) was revisited in the field during the field survey; the site is currently disturbed by development and sidewalk hardscape. The bedrock mortar associated with the site is still on-site and a plaque describes the site as the Saclan Village.

A hand trowel was used to remove vegetation in order to observe the ground surface throughout the surveyed areas. In addition, due to the heavy vegetation and grass cover that overlays the entire Project area, two shovel test pits were dug in areas considered of higher sensitivity for archaeological resources, in order to better observe the subsurface conditions and inspect for evidence of archaeological deposits. No evidence of archaeological deposits was identified as the result of the surveys.

Consistent with CalVTP SPR CUL-2, an updated Native American contact list and sacred lands file search was obtained from the NAHC. The sacred lands data file indicated no sacred sites had previously been recorded within the Project area or adjacent lands. On August 21, 2023, letters were sent to each of the 18 Tribal contacts provided by the NAHC via certified mail. The letters requested information regarding

Tribal resources and asked the tribes to notify CCCFPD if they wished to initiate consultation regarding the Project actions. To date, no responses have been received. As planning proceeds, CCCFPD will continue to consult with interested Tribal representatives regarding the Project and incorporate their concerns into project planning and mitigation as warranted.

Impact CUL-1

The potential for vegetation treatment activities, such as manual and mechanical treatments that cause ground disturbance, to cause adverse effects to historical resources (those resources evaluated as eligible for listing in the CRHR), was examined in the PEIR and found to be less than significant. The Moraga-Orinda Transmission Line, which has been evaluated as a linear historic district, intersects portions of the Project area; however, none of the activities associated with the Project will adversely affect this resource due to the lack of material alteration of the resource by the Project; and therefore, it requires no further treatment or mitigation. Additionally, any potential impact to historical resources would be avoided, per SPR CUL-7, due to the lack of any proposed demolition or material alteration of a structure or building. This potential impact is within the scope of the PEIR, because the treatment activities and the intensity of ground disturbance that would occur under the proposed Project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-7, and CUL-8. As described above, archaeological and historical resource record searches have been conducted per SPR CUL-1. SPR CUL-7 requires the avoidance of known built historical resources and the avoidance of built-environment structures that have not yet been evaluated for historical significance and SPR CUL-8 requires worker training regarding protection of historical resources.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, the potential to encounter built-environment structures that have not yet been evaluated for historical significance in areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to historical resources is also the same, as described above. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-2

Vegetation treatment activities would include mechanical treatments that use heavy equipment that could result in ground disturbance as vegetation is removed, which may result in adverse impacts to unknown historical resources (archaeological sites) or unique archaeological resources if present within a treatment area. The Rossmoor Site, or CA-CCO-309 (P-07-000186), falls directly within a small area where proposed Project actions may adversely affect the deposit, despite the area having been previously investigated, including a complete data recovery excavation (WSA 2006). Due to the sensitive nature of this archaeological resource and its importance to California prehistory, the area should be avoided to the extent feasible by following SPR CUL-5. The following project-specific measure is hereby included in SPR-5:

SPR CUL-5: Treatment of Archaeological Resources

- Prior to any ground disturbing activities within the area of Tice Creek and Rossmoor Parkway, a qualified archaeologist (see CalVTP PEIR Page 3.15-12) shall be retained to cordon or fence the known boundaries of CA-CCO-309 to avoid any potential disturbance of the site. If requested by the tribes, a consulting Tribal representative shall also be contacted to provide guidance regarding the avoidance measures. If the proposed activities cannot avoid the location to achieve the objective of the project, the archaeologist shall monitor all ground disturbing activity within the boundaries of the site. Ground disturbing activity includes any mechanical or other alteration of the surface. A Tribal representative may also participate in the monitoring activities. If any cultural materials are identified, all work within the area of the find shall halt until the archaeologist and Tribal representative can assess the significance of the find. If the find is determined to not contribute to the significance of the site, the activities can resume within the boundaries of the site. If they are determined to contain additional, substantial data related to the significance of the site, the stipulations outlined in MM CUL-2 shall be followed regarding a data recovery plan.

The potential for treatment activities to result in disturbance to, damage to, or destruction of archaeological resources was examined in the PEIR and found to be significant but would be less than significant for the proposed Project with implementation of SPRs and mitigation. This impact is within the scope of the PEIR, because the treatment activities and the intensity of ground disturbance that would occur under the proposed Project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1 through CUL-5, and CUL-8. As described above, methods consistent with SPR-1 through SPR-4 have been implemented for the purposes of this PSA. Further, SPR CUL-8 shall be implemented, which requires worker training regarding the protection of sensitive archaeological, historical, and Tribal cultural resources. MM CUL-2 would also apply to this treatment to protect any inadvertent discoveries of archaeological resources.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, the potential for discovery of archaeological resources is essentially the same within and outside the treatable landscape; therefore, the potential impact to unique archaeological resources or subsurface historical resources is also the same, as described above. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

<u>Impact CUL-3</u>

As previously summarized, Native American contacts identified by the NAHC were sent an invitation to consult via certified mail on August 21, 2023, consistent with the requirements of SPR CUL-2. To date, no responses have been received. The potential for treatment activities to cause a substantial adverse change in the significance of a Tribal cultural resource was examined in the PEIR. Proposed treatment

activities include manual and mechanical treatment activities that may require ground disturbance, as well as the use of herbicides, which may adversely affect ethnobotanicals or material culture that may have Tribal importance. The potential for the proposed treatment activities to cause a substantial adverse change in the significance of a Tribal cultural resource during vegetation treatment was examined in the PEIR and found to be less than significant with the implementation of SPR CUL-6. As planning proceeds, additional information provided by tribes during the consultation process may identify the potential for a substantial adverse change to a Tribal cultural resource to result from Project-related actions, and measures to protect the resource shall be formulated consistent with SPR CUL-6, which, upon implementation, would avoid any substantial adverse change to any Tribal cultural resource. The potential for adverse effects on Tribal cultural resources during implementation of the proposed Project is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are CUL-1 through CUL-6, and CUL-8. SPRs CUL-1 through CUL-4 have been conducted during preparation of this PSA. SPR CUL-5 and CUL-6 require consulting with the geographically affiliated tribes to avoid and protect any resources identified, and SPR CUL-8 requires worker training regarding the protection of sensitive archaeological, historical, and Tribal cultural resources.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the potential for tribal cultural resources present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to tribal cultural resources is also the same, as described above. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact CUL-4

Vegetation treatment activities would include mechanical treatments that use heavy equipment that could result in ground disturbance as vegetation is removed, which could uncover human remains, if present in a treatment area. The potential for treatment activities to uncover human remains was examined in the PEIR and found to be less than significant. The NWIC records search identified one previously recorded site (CA-CC0-309) that has the potential to contain human remains. This impact is within the scope of the PEIR, because the intensity of ground disturbance under the proposed Project is consistent with what was analyzed in the PEIR. Additionally, consistent with the PEIR, the proposed Project would comply with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097 in the event of a discovery.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the potential for discovery of human remains present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential

impact to tribal to human remains is also the same, as described above. This impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Archaeological, Historical, and Tribal Cultural Resource Impacts

The proposed Project treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The Project proponent has considered the site-specific characteristics of the proposed treatment Project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Sections 3.5.1, "Environmental Setting" and 3.5.2, "Regulatory Setting" in Volume II of the Final PEIR). The Project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a changed circumstance to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, the existing environmental and regulatory conditions pertinent to archaeological, built historical resources, or Tribal cultural resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment Project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new or more severe significant impacts. Therefore, no new impact related to archaeological, historical, or Tribal cultural resources would occur.

## 4.5 Biological Resources

**Table 7.** Consistency of Project-Related Biological Resources Impacts with the Scope of the CalVTP PEIR.

| Impact in the PEIR | | | Project-Specific Checklist | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Environmental Impact Covered in the PEIR** | **Identify Impact Significance in the PEIR** | **Identify Location of Impact Analysis in the PEIR** | **Does the Impact Apply to the Treatment Project?** | **List SPRs Applicable to the Treatment Project[1]** | **List MMs Applicable to the Treatment Project[1]** | **Identify Impact Significance for Treatment Project** | **Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?** | **Is this Impact Within the Scope of the PEIR?** |
| **Would the project:** | | | | | | | | |
| Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications | LTSM | Impact BIO-1, pp. 3.6-131–3.6.138 | Yes | AD-2, AD-3, AD-5, AQ-3, AQ-4, BIO-1, BIO-2, BIO-3, BIO-5, BIO-6, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HAZ-5, HAZ-6, HYD-2 | BIO-1a, BIO-1b, BIO-3a, BIO-4 | LTSM | No | Yes |
| Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications | LTSM | Impact BIO-2, pp. 3.6-138–3.6-184 | Yes | AD-2, AD-3, AD-5, AQ-3, AQ-4, BIO-1, BIO-2, BIO-3, BIO-5, BIO-9, BIO-10, BIO-11, BIO-12, GEO-1, HAZ-5, HAZ-6, HYD-1, HYD-2, HYD-3, HYD-4, HYD-5 | BIO-2a, BIO-2b, BIO-2e, BIO-2g, BIO-3a, BIO-4, BIO-5 | SU: Crotch's and obscure bumble-bee<br><br>LTSM for all others | 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 | AD-2, AD-3, AD-5, BIO-1, BIO-2, BIO-3, BIO-5, BIO-6, BIO-9, HYD-4 | 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 | AD-2, AD-3, AD-5, BIO-9, HAZ-5, HAZ-6, HYD-1, HYD-2, HYD-3, HYD-4, HYD-5 | BIO-4 | LTSM | No | Yes |

| Impact in the PEIR | | | Project-Specific Checklist | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Environmental Impact Covered in the PEIR** | **Identify Impact Significance in the PEIR** | **Identify Location of Impact Analysis in the PEIR** | **Does the Impact Apply to the Treatment Project?** | **List SPRs Applicable to the Treatment Project[1]** | **List MMs Applicable to the Treatment Project[1]** | **Identify Impact Significance for Treatment Project** | **Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?** | **Is this Impact Within the Scope of the PEIR?** |
| 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 | AD-2, AD-3, AD-5, BIO-1, BIO-2, BIO-3, BIO-5, BIO-10, BIO-11, HYD-4, HYD-5 | 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 | AD-2, AD-3, AD-5, BIO-1, BIO-2, BIO-3, BIO-5, BIO-12 | -- | LTS | No | Yes |
| Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources | No Impact | Impact BIO-7, pp. 3.6-198–3.6-199 | Yes | AD-3 | -- | No Impact | No | Yes |
| Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan | No Impact | Impact BIO-8, pp. 3.6-199–3.6-200 | No | -- | -- | -- | -- | -- |

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.5.1 Discussion*

Impact BIO-1

The Project proposes manual and mechanical vegetation removal, prescribed burning, pile burning, prescribed herbivory, and targeted herbicide application. These treatment activities could result in direct or indirect adverse effects to special-status plant species. Mechanical treatment and herbicide application have potential to impact special-status species directly or indirectly if not strategically

applied; however, strategic removal of understory vegetation and invasive species would promote the regeneration of native species that support a healthier residual forest. The Project is designed to reduce the risk of catastrophic stand-replace wildfires, which would threaten known sensitive plant populations.

The potential for adverse effects to special-status plant species is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance resulting from implementing treatment activities are consistent with those analyzed in the PEIR. Impacts to special-status plants would be reduced to less than significant through following certain SPRs and MMs (Attachment A). In addition to the CalVTP PEIR SPRs and MMs, additional Project-specific measures are described below each applicable measure.

Six (6) sensitive plant species have moderate to high potential to occur on the Project site. The potential for adverse effects to special-status plant species is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance resulting from implementing treatment activities are consistent with those analyzed in the CalVTP PEIR. Impacts to special-status plants would be reduced to less than significant with the following SPRs and MMs. Additional Project-specific measures are described below each applicable measure.

SPR AD-2: Delineate Protected Resources for Avoidance

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

SPR AD-5: Maintain Site Cleanliness

SPR AQ-3: Create Burn Plan

- No fire ignition (nor use of associated accelerants) would occur within 50 feet of listed plants.

SPR AQ-4: Minimize Dust

SPR BIO-1: Review and Survey Project-Specific Biological Resources and Determine Whether Avoidance is Possible

SPR BIO-2: Require Biological Resource Training for Workers

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats and Map Locations

- If any rare plant populations are found, the location, quantity and description would be reported to the California Natural Diversity Database (CNDDB). Any in-field methods of identification that would require handling would follow proper permitting and protocols.

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub

SPR BIO-6: Prevent Spread of Plant Pathogens

- To contain the spread of *P. ramorum*, crews would minimize the movement of soil and leaf litter under and around infected trees. Boots, treads, and equipment such as saws, shovels, hoes, and other tools would be scrubbed free of soil and debris that come from infected sites. All reasonable methods to sanitize shoes and equipment would be used in areas with susceptible species, both before and after work in those areas. These methods would follow best practices which would include disinfecting material with 10 percent bleach, Lysol, or 70 percent isopropyl alcohol after the surface has been scrubbed free of debris with bristle brushes, or other BMPs.
- Any material suspected of being infected would stay in the area, as close to the origin point as possible. Generally, removal of *P. ramorum*-infected or killed oak trees would only be necessary if the tree is considered hazardous in a park setting. When infected oaks are cut down and left on-site, the branches would be chipped and cut and split, if possible, to reduce fire hazard and facilitate decomposition. If chipping is not possible, material would be lopped and scattered downslope and away from host species to reduce fire hazard and further spread. When it is not feasible to leave debris on-site, infested material would be disposed of at an approved and permitted dump facility.

SPR BIO-7: Survey for Special-Status Plants

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife

- Treatment of invasive plants and noxious weeds would follow the guidelines provided by Cal-IPC and other current scientifically based methods.
- When working in areas with broom, starthistle, or other invasive plants, crews would ensure equipment is cleaned of all soil, mud, and debris before departing the site. Whenever possible, crews and equipment would remain on paved, rocked, and well-traveled trails and would avoid cross-country travel. Mud, soil, and organic debris would be removed from equipment, treads, and boots before moving between work sites, with removed soil being left at its original location.

SPR GEO-1: Suspend Disturbance during Heavy Precipitation

SPR GEO-3: Stabilize Disturbed Soil Areas

SPR GEO-4: Erosion Monitoring

SPR GEO-5: Drain Stormwater via Water Breaks

SPR GEO-7: Minimize Erosion

- Whenever feasible, heavy equipment would remain on a stable operating surface to prevent erosion. Heavy equipment would not occur on slopes of 50 percent or greater.

SPR HAZ-5: Spill Prevention and Response Plan

- Herbicide application would not occur within protective buffers for special-status plants to prevent drift and non-target application.

SPR HAZ-6: Comply with Herbicide Application Regulations

SPR HYD-2: Avoid Construction of New Roads

Even with implementation of the above SPRs, impacts could be potentially significant per the CalVTP PEIR. MMs BIO-1a and BIO-1b would be required when the following conditions are met:

- where sensitive species are known to occur,
- when treatments cannot be completed in the dormant season, or the species are persistent year-round due to its lifecycle (woody or non-dormant),
- when treatments would be implemented during the growing period of sensitive annual and geophyte species, and
- where protocol-level surveys are required (per SPR BIO-7) and special-status plants are identified during these surveys.

Following implementation of MMs BIO-1a and BIO-1b, special-status plants identified during protocol-level surveys would be given a no-disturbance buffer of 50 feet within which vegetation treatment activities would not occur unless a qualified RPF or biologist determines that the species would benefit from treatment in the occupied habitat area. The size and shape of the generally 50-foot buffer would be adjusted if a qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts on listed plants. Additionally, all state and federally protected wetlands would be avoided (MM BIO-4) by a standard buffer of 25 feet and would be adjusted if slopes or other conditions warrant an increased buffer. Mitigation of the 18 special-status plant species with potential to occur is considered based on persistence of detection throughout their lifecycle.

MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA

MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands

MM BIO-4: Avoid State and Federally Protected Wetlands

*Impacts to Annual Forbs*

*Focused botanical surveys were performed in 2023 during the appropriate bloom period for each of these species (MM BIO-1a and MM BIO-1b).* Annual forb plant species exhibit seasonal vegetative growth and flowering, followed by a dormant period where the vegetation dries after seeding, and new individuals are expected to grow in the same general vicinity in subsequent years. The following annual forb species have potential to occur on the Project site:

- Bent-flowered fiddleneck (*Amsinckia lunaris*)
- California androsace (*Androsace elongata* ssp*. acuta*)
- Big tarplant (*Blepharizonia plumosa*)
- Bristly leptosiphon (*Leptosiphon aureus*)
- Woolly-headed lessingia (*Lessingia hololeuca*)
- Woodland woollythreads (*Monolopia gracilens*)

To avoid impacts to herbaceous annual forb species within suitable habitat, prescribed herbivory, prescribed burning, and mowing would be restricted to outside the vegetative growth period until after the species sets seed. Manual treatments would occur within the avoidance buffer under the advisory of a qualified RPF or biologist. In general, no Project-related ground disturbance would occur within a 50-foot buffer of identified individuals or within suitable habitat during dormant periods. The size and shape of the generally 50-foot buffer would be adjusted if a qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts on listed plants. If pre-treatment surveys are conducted outside of the bloom period for these species, and individuals within the same genus of special-status plants are identified, these individuals would be treated as potential special-status species and would be offered the same protective buffer for avoidance.

*Impacts to Perennial Forbs*

*Focused botanical surveys have been performed in 2023 during the appropriate bloom period for each of these species (MM BIO-1a and MM BIO-1b).* Perennial forb plant species exhibit seasonal vegetative growth and flowering, followed by a dormant period where the vegetation dries and the plant may be difficult to locate, but the plant is expected to be persistent underground during dormancy and to grow in the same location in subsequent years. Perennial forb species that have potential to occur on the Project site include:

- Mt. Diablo fairy lantern (*Calochortus pulchellus*)
- Oakland star-tulip (*Calochortus umbellatus*)
- Jepson's woolly sunflower (*Eriophyllum jepsonii*)
- Jepson's coyote-thistle (*Eryngium jepsonii*)
- Fragrant fritillary (*Fritillaria liliacea*)
- Diablo helianthella (*Helianthella castanea*)
- Loma Prieta hoita (*Hoita strobilina*)
- Sylvan microseris (*Microseris sylvatica*)
- Michael's rein orchid (*Piperia michaelii*)

To avoid impacts to special-status herbaceous perennial forb species within suitable habitat, prescribed herbivory, prescribed burning, and mowing would be restricted to outside the vegetative growth period until after the species has set seed. Manual treatments would occur with an avoidance buffer. A no-disturbance buffer of at 50 feet would be established around known perennial forbs, within which vegetation treatment activities would not occur unless a qualified RPF or biologist determines that the species would benefit from treatment in the occupied habitat area. The size and shape of the generally 50-foot buffer would be adjusted if a qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts. If pre-treatment surveys are conducted outside of the bloom period for these species, and individuals within the same genus of special-status plants are identified, these individuals would be treated as potentiall special-status species and would be offered the same protective buffer for avoidance.

*Impacts to Woody Shrubs, Trees, and Vines*

*Focused botanical surveys were performed in 2023 during the appropriate bloom period for each of these species (MM BIO-1a and MM BIO-1b).* Woody shrub, tree, and vine plant species that exhibit seasonal vegetative growth and flowering, which may or may not include a period of dormancy, are expected to be persistent above ground and detectable year-round. The following woody shrub, tree, and vine species have potential to occur on the Project site:

- Western leatherwood (*Dirca occidentalis*)
- California black walnut (*Juglans californica*)
- Oval-leaved viburnum (*Viburnum ellipticum*)

To avoid impacts to persistent above-ground perennial species, a no-disturbance buffer of 50 feet would be established around individual special-status plants, within which vegetation treatment activities would not occur unless a qualified RPF or biologist determines that the species would benefit from treatment in the occupied habitat area. The size and shape of the generally 50-foot buffer may be adjusted if a registered qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts on listed plants. If pre-treatment surveys are conducted outside of the bloom period for these species, and individuals within the same genus of special-status plants each are identified, these individuals would be treated as potential special-status species and would be offered the same protective buffer for avoidance.

*Impacts to Sensitive Natural Communities*

To avoid impacts on sensitive natural communities, focused botanical surveys would be performed (MM BIO-1a and MM BIO-1b). If identified, sensitive natural communities would be recorded using a Global Positioning System (GPS) device and mapped. No Project-related ground disturbance would occur within 50 feet of these sensitive natural communities (MM BIO-3a).

With implementation of all SPRs and MMs listed above, including survey protocols and preoperational meetings, impacts to special-status plant species would be reduced to less than significant.

Impact BIO-2

Manual and mechanical vegetation removal, broadcast and pile burning, targeted herbicide application, and prescribed herbivory have the potential to result in direct or indirect adverse effects to special-status wildlife species or habitat. Manual and mechanical treatments, herbivory, prescribed broadcast burn, and targeted herbicide application would reduce understory vegetation that may modify preferred habitats for some species, and have the potential to promote a healthier native habitat.

The potential for adverse effects to 24 special-status wildlife species is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance resulting from implementing treatment activities are consistent with those analyzed in the PEIR. With the exception of two (2) species (Crotch's and obscure bumble bee), impacts to special-status wildlife would be reduced to less than significant with the following SPRs and MMs. Additional Project-specific measures are described, as appropriate, with each applicable CalVTP SPR or MM within the species-focused discussion.

SPR AD-2: Delineate Protected Resources for Avoidance

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

SPR AD-5: Maintain Site Cleanliness

SPR AQ-3: Create Burn Plan

- No fire ignition (nor use of associated accelerants) would occur within 50 feet of listed plants, riparian habitat, or aquatic features, or any identified sensitive species or habitat.
- Within suitable winter retreats for Alameda whipsnake, prescribed burning would not occur between approximately November 1 and March 31 (as determined by a qualified biologist based on temperature and weather conditions).
- Within suitable Alameda whipsnake habitat, prescribed burning and pile burning would be restricted to when temperatures are conducive to Alameda whipsnake movement, which is typically when soil surface temperatures reach 66 °F (19 °C) (Hammerson 1979). Alternatively, piles left in place for more than a day would be investigated for Alameda whipsnake through dismantling and rebuilding piles prior to pile burning.

SPR AQ-4: Minimize Dust

SPR BIO-1: Review and Survey Project-Specific Biological Resources and Determine Whether Avoidance is Possible

SPR BIO-2: Require Biological Resource Training for Workers

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats and Map Locations

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife

SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites

SPR BIO-11: Install Wildlife-Friendly Fencing during Prescribed Herbivory

SPR BIO-12: Protect Common Nesting Birds, Including Raptors through the Use of Avoidance Buffers, Treatment Modification, or Treatment Delay. Monitor Active Raptor Nest During Treatment and Retain Raptor Nest Trees

SPR GEO-1: Suspend Disturbance during Heavy Precipitation

SPR HAZ-5: Spill Prevention and Response Plan

SPR HAZ-6: Comply with Herbicide Application Regulations

SPR HYD-1: Comply with Water Quality Regulations

SPR HYD-2: Avoid Construction of New Roads

SPR HYD-3: Water Quality Protections for Prescribed Herbivory

SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones

SPR HYD-5: Protect Non-Target Vegetation and Special-Status Species from Herbicides

Even with implementation of the above SPRs, impacts could be potentially significant per the CalVTP PEIR. Implementation will follow additional MMs BIO-2a, BIO-2b, BIO-2e, BIO-2g, BIO-4, and BIO-5, and species-specific measures as described below.

MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species

MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species

MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants – Monarch Butterfly

MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees

MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands

MM BIO-4: Avoid State and Federally Protected Wetlands

MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Site

*Impacts to Crotch's Bumble Bee and Obscure Bumble Bee*

Direct and indirect impacts could occur to Crotch's and obscure bumble bee through off-road machinery, prescribed burning, herbicide use, and removal of flowering plants. Primary threats to the survival of special-status bumble bees include habitat loss or modification due to development, agriculture, high-intensity fire, fire suppression, and herbicide use (Xerces Society et al. 2018). Because little is known about the life history and behaviors of bumble bees, and there is no established methodology for detecting overwintering or nesting colonies, they can be difficult to detect and therefore to completely avoid during treatment activities. If colonies were destroyed, it is possible that populations of these species would be reduced below self-sustaining levels, and treatment activities could substantially reduce the number or restrict the range of species.

The Project is designed to avoid riparian habitat and type-conversion of chaparral or coastal sage scrub (SPR BIO-5), and no new roads will be created (SPR HYD-2). Pre-treatment surveys would combine a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify burrows and suitable habitat within the project site. CDFW (2023) issued "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species", which offers a survey methodology for Crotch's and obscure bumble bees, among others. In lieu of or in addition to surveys, the Project proponent may choose to assume presence and rely on habitat as an indicator of presence. Crew members and contractors would be trained to identify and avoid this species if encountered (SPR BIO-2), and a biologist would be available as needed to provide guidance when crews are working within suitable bumble bee habitat. If work occurs within occupied bumble bee habitat, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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 identified, these burrows would be protected with an avoidance buffer (SPR AD-2). A Spill Prevention and Response Plan (SPR HAZ-5) will be developed as part of Project implementation, and the Project proponent will comply with herbicide application regulations (SPR HAZ-6) and restrict use of herbicide to avoid native plants.

The objectives of the CalVTP treatment activities are to reduce the occurrence of high-intensity wildfire and to modify past practices of fire suppression. Project implementation could thus be beneficial to bumble bees by reducing high-intensity wildfire and improving habitat for bumble bee species; however, in the process of achieving this objective, there are potentially significant direct impacts to bumble bees. The CalVTP PEIR acknowledges the difficulty in detecting overwintering and nesting bumble bees and in determining the occurrence and severity of impacts; it concludes that implementation of the CalVTP could cause impacts to special-status bumble bees which are potentially significant and unavoidable. The proposed Project impacts are consistent with those described in the CalVTP PEIR, and the proposed treatment activities may result in impacts to Crotch's and obscure bumble bee that are potentially significant and unavoidable.

*Impacts to Monarch Butterfly*

Direct and indirect impacts could occur to monarch butterfly through removal of flowering plants providing nectar, removal of native milkweed stands for larval development, removal of overwintering habitat, and collisions with Project vehicles.

Pre-treatment surveys would be combined with a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) within suitable monarch butterfly larval and overwintering habitat for the species. Crew members and contractors would be trained to identify and avoid milkweed and monarch butterfly if encountered (SPR BIO-2), and a qualified RPF or biologist available to provide guidance as needed. If identified, larval or overwintering monarchs would be protected with an appropriate avoidance buffer (SPR AD-2). A Spill Prevention and Response Plan (SPR HAZ-5) would be developed as part of Project implementation, and the Project proponent would comply with herbicide application regulations (SPR HAZ-6) and restrict use of herbicide to avoid native plants.

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, the implementation of MM BIO-2a, BIO-2b, BIO-2e, and BIO-3a would be implemented, including targeting removal of invasive vegetation, protecting native milkweed, protecting overwintering sites, and restricting prescribed burning activities in suitable monarch habitat when the species is observed to avoid direct impacts to individuals. If monarch butterfly, monarch larvae host plants (e.g., *Asclepias californica, A. fascicularis*, *A. speciosa*) or overwintering roost trees are identified during focused surveys (conducted pursuant to SPR BIO-10), or the species is assumed to be present in lieu of conducting surveys, the Project proponent would avoid or minimize adverse effects on the species by avoiding treatment activities in suitable monarch habitat during overwintering or larval periods. If monarch overwintering groups or larvae are detected, an appropriate buffer would be established as determined by a qualified RPF or biologist. Avoidance buffers would be flagged for avoidance by the Project proponent within which no treatment activities would occur, a qualified biologist or RPF would be available to provide guidance as needed, and/or other measures recommended by CDFW as necessary to avoid injury to or mortality of these species or impacts to the population. If work occurs within occupied monarch habitat MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: “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.” Because the Project proposes to remove invasive species through various treatments, the results of Project implementation may improve habitat quality for monarch butterfly. With these additional focused MMs, impacts to monarch butterfly would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to Blainville’s Horned Lizard*

Direct impacts to Blainville’s horned lizard include crushing individuals. Indirect impacts to Blainville’s horned lizard include loss of prey base through nest destruction or providing an environment where invasive ants can outcompete prey species.

Pre-treatment surveys would be combined with a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify individuals within suitable habitat within the Project footprint. Crew members and contractors would be trained to identify and avoid crushing suitable habitat and individuals of all life stages (SPR BIO-2), and a qualified biologist or registered RPF would be available to provide guidance as needed. If individuals are encountered, they would be protected with an avoidance buffer (SPR AD-2) and would be allowed to leave the work site of their own volition. Manual removal of these species is not anticipated during work, but a permitted biologist with an applicable CDFW Scientific Collecting Permit (SCP) would be available during work activities, as necessary.

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-2b and BIO-3a would be implemented within suitable habitat. A qualified RPF or biologist would be available to provide guidance during treatment activities as needed. If work occurs within suitable habitat, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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."

All contractors, their employees, and agency personnel involved in Project implementation would check for the presence of any sensitive wildlife under or next to stationary vehicles prior to moving them. If a special-status reptile or amphibian is found, a qualified RPF or biologist would be available to provide guidance and determine necessary next steps to avoid impact. If pile burning is implemented, piles would be placed away from suitable habitat for Blainville's horned lizard.

*Impacts to California Red-Legged Frog, California Tiger Salamander, California Newt, and Western Pond Turtle*

Manual and mechanical methods of vegetation removal could impact upland areas used for egg laying, and vehicles or livestock used for prescribed herbivory could trample burrowing amphibians and reptiles or western pond turtle eggs. Herbicide use could impact water quality and suitable breeding habitat for special-status amphibians and aquatic reptiles.

The Project is designed to avoid riparian habitat, aquatic features, and protection zones (SPR HYD-4), type-conversion of chaparral or coastal sage scrub (SPR BIO-5), and creation of new roads (SPR HYD-2). SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated, would reduce the potential for Project activities to disturb ground-supporting burrows, nests occupied by special-status aquatic reptiles and amphibians, and would reduce the potential for impacts to these species. To protect both aquatic and upland habitat, a Spill Prevention and Response Plan (SPR HAZ-5) would be developed as part of Project implementation. The Project proponent would comply with water quality regulations (SPR HYD-1), would adhere to water quality protection measures when conducting prescribed herbivory (SPR HYD-3), would follow herbicide application regulations (SPR HAZ-6) and restrict use of herbicide to avoid native plants, and would reduce the potential for impacts to aquatic and upland habitat occupied by these species.

Pre-treatment surveys would be combined with a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify individuals of all life stages and suitable habitat for California red-legged frog, California tiger salamander, California new, and western pond turtle within the Project footprint. Crew members and contractors would be trained to identify and avoid nests, aestivation and breeding habitat, and individuals of all life stages (SPR BIO-2), and a qualified RPF or biologist would be available to provide guidance as needed. If occupied habitat is encountered, it would be protected with an appropriate avoidance buffer (SPR AD-2). Special-status amphibians or aquatic reptiles entering the work area would be given an appropriate buffer and be allowed to leave the work area of their own volition. Manual removal of these species is not anticipated during work, but a permitted biologist with applicable CDFW SCP and/or USFWS 10(a)(1)(A) permits would be available during work activities to provide support.

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-2a, BIO-2b, BIO-3a, and BIO-4 would be implemented, including avoiding suitable breeding habitat during breeding season such as riparian with a minimum 50-foot buffer, and wetland and aquatic habitat with a minimum 25-foot buffer; avoiding potentially suitable burrows within suitable overwintering habitat ; having a qualified RPF or biologist available during treatment activities to provide support and guidance during an encounter; and avoiding vegetation treatment within occupied habitat or during sensitive periods in these species' life cycles, as determined by a qualified RPF or biologist. If work occurs within occupied habitat MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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."

A qualified biologist would conduct protocol-level surveys for California red-legged frog pursuant to the Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005) within habitat potentially suitable for the species, or presence of the species would be assumed and MM BIO-2a would be implemented. If protocol-level surveys are conducted and California red-legged frogs are not detected within the treatment areas, then no mitigation for the species would be required and avoidance buffers (as required in MM BIO-2a) would not be required. If California red-legged frog is detected or assumed present, MM BIO-2a would be implemented.

To avoid impacts on western pond turtle, California newt, and California tiger salamander, focused visual encounter surveys for the species and for potentially suitable burrows would be conducted within habitat areas suitable for the species prior to treatment activities within approximately 1,500 feet of aquatic habitat (e.g., streams, ponds). If upland habitat with suitable burrows/nest sites for western pond turtle is detected, the qualified RPF or biologist would inspect the burrow to determine whether it is occupied. If western pond turtle is identified during focused surveys or assumed present, MM BIO-2b for these species would be implemented.

Within suitable habitat where special-status aquatic reptiles or amphibians are assumed present or detected during protocol-level surveys, the following measures would be implemented:

- Mechanized operations would be shut down when the precipitation threshold is met, and the shutdown period would begin once the precipitation event has ended.
- If treatment activities occur within or adjacent to suitable or occupied habitat for special-status aquatic reptile and amphibians, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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 impacts would remain significant under CEQA and the Project proponent determines that additional mitigation is necessary to reduce significant impacts, MM BIO-2c would be required, and incidental take permitting under CESA may be required pursuant to consultation with CDFW.
- If a special-status aquatic reptile or amphibian enters the Project site during treatment activities, all work would stop within a non-disturbance buffer around the individual, as determined by qualified RPF or biologist. Treatment activities would cease within the buffer until the animal leaves on its own.
- All herbicide use during Project implementation would 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 US EPA by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications would be allowed in suitable habitat for special-status aquatic reptiles and amphibians under the following conditions:
    - Cut stump and basal bark applications may be used but would 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 would be evaluated for the presence of special-status species by a qualified biologist, qualified professional, RPF, RPF-supervised designee, or a contractor who has been through the environmental awareness training.
- All contractors, their employees, and agency personnel involved in the implementation of the Project would check for the presence of sensitive wildlife under or next to stationary vehicles prior to operating their vehicles. If a special-status reptile or amphibian is found, the qualified RPF or biologist would determine necessary next steps to avoid impact.
- Pile burning treatment would avoid potential refugia for special-status aquatic reptile and amphibian species.
- Within suitable habitat, heavy equipment, including mowing equipment which may collapse burrows, would be utilized exclusively from stable operating surfaces such as established roads and trails.

With these additional MMs, impacts to California red-legged frog, California tiger salamander, California newt, and western pond turtle would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to Alameda Whipsnake*

Direct impacts to Alameda whipsnake could occur through crushing the animals with vehicles, collapsing occupied burrows, or burning occupied piles. Indirect impacts could occur from habitat type conversion of scrub and chaparral. Within Alameda whipsnake habitat, treatment methods would primarily include manual methods, and grazing and prescribed burning in adjacent habitat. Mechanical equipment would not be operated within suitable Alameda whipsnake habitat.

The Project is designed to avoid type-conversion of chaparral or coastal sage scrub (SPR BIO-5), and creation of new roads (SPR HYD-2). SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated, would reduce the potential for Project activities to disturb ground-supporting burrows, and would reduce the potential for impacts to this species. Within suitable Alameda whipsnake habitat, pre-treatment surveys would be combined with a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify individuals and burrow sites within the Project footprint. Crew members and contractors would be trained to identify individuals and burrows (SPR BIO-2), and a biological monitor would be present on-site within Alameda whipsnake habitat to provide guidance as needed. If individuals are encountered, they would be protected with an appropriate avoidance buffer (SPR AD-2) and would be allowed to leave the work area of their own volition. To protect habitat, a Spill Prevention and Response Plan (SPR HAZ-5) would be developed as part of Project implementation. The Project proponent would follow herbicide application regulations (SPR HAZ-6).

Even following the above SPRs, Project impacts could still be considered potentially significant. Measures that ensure full avoidance of Alameda whipsnake take would be implemented at all Project areas. Therefore, implementation of the following Alameda whipsnake avoidance and minimization strategy would be utilized, which is consistent with CalVTP MMs: BIO-2a, BIO-2b, and BIO-5.

- Pre- and during-treatment surveys. Either treatment will avoid occupied habitat or treatment will be implemented in such a way that it does not disturb Alameda whipsnake. If work occurs within occupied habitat MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: “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.” Implementing treatment activities within suitable Alameda whipsnake habitat would require focused surveys to determine presence of Alameda whipsnake each day prior to work at each new area. If crews are working within suitable Alameda whipsnake habitat, a qualified RPF or biologist would conduct ongoing focused pre-treatment surveys during treatment activities, adhering to methodologies recommended in Miller and Alvarez (2016). Within highly suitable habitat, surveys would be repeated in treatment areas immediately prior to vegetation removal to ensure that the species is not

present prior to the start of work in each scrub area. A qualified RPF or biologist would check suitable refugia within the work area including vegetation and rock piles. When dense vegetation within suitable Alameda whipsnake habitat inhibits visual survey effectiveness, the biologist would work closely with the crew to intermittently cut a small amount of brush to allow surveys of small areas. Active surveys would be performed throughout the vegetation removal activity within suitable Alameda whipsnake habitat, and if work ceases more than one hour, the area would be re-surveyed prior to restarting work. During this survey effort, the qualified RPF or biologist would also advise the crew on avoidance of on-site potential refugia such as burrows and rock piles.

In addition to pre- and during-treatment surveys and monitoring, the following avoidance and minimization strategies will be employed:

- Prior to vegetation clearing activities within suitable Alameda whipsnake habitat, coverboards would be installed in key areas as determined by a RFP or qualified biologist. The coverboards would be strategically placed to provide refuge for the Alameda whipsnake leaving the work area. Coverboards would be inspected at the end of each workday and wildlife using them would be recorded.
- Prior to operating stationary vehicles and equipment, all contractors, their employees, and agency personnel would check under and near vehicles/equipment for the presence of Alameda whipsnake and any wildlife that may have moved there. If Alameda whipsnake or any wildlife are discovered, the qualified biologist would be contacted immediately. The qualified biologist shall have the authority to halt Project activities until the animal leaves the area of its own accord, and shall contact USFWS, as necessary, to determine necessary steps. Manual removal of the species is not anticipated during vegetation treatment activities, but permitted biologists with applicable CDFW SCPs and/or USFWS 10(a)(1)(A) permits would be on-call during Project activities.
- Seasonal restrictions: Within suitable Alameda whipsnake habitat, mechanical treatment and prescribed burning would be avoided when temperatures are determined by the qualified biologist to be too low for Alameda whipsnake movement (soil surface temperatures reach 66 °F (19 °C) (Hammerson 1979)). Manual treatments may occur in cooler conditions, after the qualified biologist has thoroughly surveyed the area. In habitat suitable for Alameda whipsnake suitable winter retreats, as determined by a qualified biologist, prescribed broadcast burning would not occur between approximately November 1 and March 31 and typically when soil surface temperatures reach 66 °F (19 °C) (Hammerson 1979), or as determined by a qualified biologist.
- Debris management: Contractors would immediately (i.e., the same day) process (i.e., remove completely from the treatment area, chip, permanently place within the treatment area for soil stabilization) all cut materials as they are produced to avoid attracting Alameda whipsnake to the vegetation piles. If processing within the same day is not feasible, the RPF or qualified

biologist would advise crews on a suitable location for temporary storage of cut materials that cannot be processed immediately, or the materials would be deconstructed and investigated prior to processing under the advisory of the qualified RPF or biologist. Chipped materials would not be spread on suitable refugia for Alameda whipsnake such as rodent burrows or rocky outcrops.

- Pile burning: The following measures apply when work occurs in suitable Alameda whipsnake habitat:
  - During any season, vegetation piles for burning would either be burned the same day, or the pile would be deconstructed and investigated prior to burning.
  - Placement of piles for burning would avoid suitable refugia for Alameda whipsnake, including large rodent burrows and rocky outcrops.
  - Directional pile burning: Fires would be lit from one end of the pile (typically the uphill side on slopes) to allow Alameda whipsnake to escape, rather than lighting the whole pile at once.

Maintaining Alameda Whipsnake Habitat Function. CalVTP MM BIO-2a requires habitat function to be maintained for Alameda whipsnake. Suitable Alameda whipsnake habitat is described in the USFWS Critical Habitat Designation (USFWS 2006) as comprising three habitat types: core scrub, dispersal/foraging habitat, and rocky outcrop habitat. Dispersal and foraging habitat include woodland or annual grassland contiguous to core scrub habitat. The nature of the Project activities would not change the habitat functional of dispersal and foraging habitat, because large oak woodland trees would be retained, and scrub and grassland habitat would not be heavily targeted for treatment.

Core scrub habitat is described as shrub communities with a mosaic of open and closed canopy patches. USFWS defines scrub as coastal scrub, coyote brush scrub, or maritime chaparral areas (or “scrub”) greater than 0.5 acre in size, or scrub areas greater than 0.2 acre in size that are within 50 feet of scrub patches greater than 0.5 acre in size (USFWS 2006). When work is occurring within core scrub habitat areas, the crew would work closely with the biologist to selectively remove scrub in a way that retains these dimensions, and therefore retains the overall habitat function while still serving the needs of the shaded fuel break. This technique has been used on previous projects and aims to provide a “scrub mosaic” that retains Alameda whipsnake habitat function. Scrub mosaic recommendations may vary depending on site conditions. The following techniques would be implemented during treatment:

- Vegetation removal would occur in irregular, oblong shapes to maintain a natural condition.
- Vegetation removal would avoid rocky outcrops.
- The overall dominant habitat type would not be converted.
- Vegetation removal would focus on dead, woody vegetation, and invasive plants.

Preliminary and post-treatment surveys would be conducted that would assess the condition and acreage of Alameda whipsnake core scrub habitat. Post-treatment conditions would be assessed to ensure that there is no overall loss of habitat function within Alameda whipsnake core scrub. It should be noted that scrub and chaparral are transitional habitat types and, over time, canopy in these areas grows taller and denser, and larger tree species such as oak and madrone are naturally recruited and become increasingly dominant. Without any intervention, over a long period of time, chaparral and scrub communities would naturally convert to woodland and forested habitat. Thoughtful treatment of select areas that incorporates retention of scrub islands suitable for Alameda whipsnake core scrub is expected to be more effective in retaining key core scrub habitat for Alameda whipsnake than complete inaction in these areas. This is consistent with Alameda whipsnake habitat protections described in CalVTP MM BIO-2b.

The following additional measures apply within suitable Alameda whipsnake habitat:

- All contractors, their employees, and agency personnel involved in the implementation of the Project would check for the presence of sensitive wildlife under or next to stationary vehicles prior to operating their vehicles. If an Alameda whipsnake or any wildlife is found, the qualified RPF or biologist would determine necessary steps to avoid impact.
- Pile burning treatment would avoid potential refugia for Alameda whipsnake.
- Within suitable habitat, heavy equipment, including mowing equipment which may collapse burrows, would be utilized exclusively from stable operating surfaces such as established roads and trails.

With these additional focused MMs, impacts to Alameda whipsnake would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to Special-Status Avian Species (California Condor, Northern Harrier, Bald Eagle, Golden Eagle, White-Tailed Kite, Long-Eared Owl, American Peregrine Falcon, Olive-Sided Flycatcher, Yellow Warbler, and Grasshopper Sparrow) and Nesting Birds*

Direct impacts to special-status avian species could occur if nest trees, snags, or shrubs are removed, or if ground nests are destroyed through mechanical or prescribed herbivory treatments. Indirect impacts include disturbance of active nests within a zone of influence of Project activities, depending on the equipment to be used, anticipated amount of time for construction at a given location, sensitivity to disturbance of any nesting birds present, and other factors. Limbing-up of nest trees or trees adjacent to nest trees could disturb nesting activity. Removal of vegetative cover could indirectly impact nesting birds by reducing cover protecting bird nests or prey species.

The Project is designed to avoid riparian habitat and type-conversion of chaparral or coastal sage scrub (SPR BIO-5), and no new roads would be created (SPR HYD-2). Trees greater than approximately 6 inches DBH would be retained unless they pose a fire hazard as determined by the Project proponent. SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated,

would reduce the potential for Project activities to disturb ground-supporting burrows for prey species such as rabbits and small mammals, and would reduce the potential for indirect impacts to these species. During prescribed herbivory activities, wildlife-friendly fencing would be installed to allow perching by avian species and prevent electrocution (SPR BIO-11). Pre-treatment surveys would be combined with a focused nesting survey during nesting season (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify avian nests within the Project footprint and species-specific buffers (e.g., 0.5-mile buffer for golden eagle). Crew members and contractors would be trained to identify and avoid special-status avian nests if encountered (SPR BIO-2), and a qualified RPF or biologist would be available to provide guidance as needed. If identified, active nests (e.g., eggs, nestlings, parental attendance) would be protected with an avoidance buffer (SPR AD-2).

Even following the above SPRs, Project impacts to special-status avian species could still be considered potentially significant. Therefore, MMs BIO-2a, BIO-2b, and BIO-4 would be implemented, including avoidance of sensitive habitats, retaining habitat function, prevent habitat type conversion, and restriction of treatment activities to the non-nesting season as feasible for Project objectives to avoid impacts to nest success (as applicable), nests, and prey base. If active bird nests are detected during focused surveys, a no-disturbance buffer would be established based on species and life stage, and no treatment activities would occur within this buffer until the chicks have fledged or the nest is otherwise no longer active, or as determined by a qualified RPF or biologist.

If it is infeasible to avoid vegetation treatment within nesting season, only manual treatment would be permitted and a RPF or biological monitor would be available during treatment activities. If work occurs within the vicinity of an active nest, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: “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.” A biological monitor would be present on-site during work within the vicinity of raptor, eagle, or special-status bird nests. No trees containing raptor nests would be removed. Additionally, trees containing golden eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act.

With these additional focused MMs, impacts to special-status avian species would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to Nesting Birds Protected by the Migratory Bird Treaty Act*

Project treatment activities could result in direct loss of active nests through crushing or destroying nests or nest vegetation or by force-fledging nestlings before completion of the nestling period. Indirect impacts could include loss of habitat for nesting and resources for foraging. Indirect impacts could also include disturbance to active nests from auditory and visual stimuli (e.g., heavy equipment, chain saws, vehicles, personnel), potentially resulting in abandonment and loss of eggs or chicks. Indirect impacts to nesting birds could occur by drawing the attention of visual predators through the removal of vegetative cover around a nest which had previously hidden the nest from predators and provided ample cover for

parents to sneak on and off active nests, and the removal of food base (seeds, insects, fruit, rodents, etc.).

The Project is designed to avoid riparian habitat and type-conversion of chaparral or coastal sage scrub (SPR BIO-5), and no new roads would be created (SPR HYD-2). Crew members and contractors would be trained to identify and avoid raptor nests if encountered (SPR BIO-2) and a RPF or biological monitor would be on-site to monitor active raptor nests during Project implementation. A Spill Prevention and Response Plan (SPR HAZ-5) would be developed as part of Project implementation, and the Project proponent would comply with herbicide application regulations (SPR HAZ-6) and restrict use of herbicide to avoid native plants. SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated, would reduce the potential for Project activities to disturb ground-supporting burrows for prey species such as insects and small mammals, and would reduce the potential for indirect impacts to these species. During prescribed herbivory activities, wildlife-friendly fencing would be installed that would allow perching by avian species and prevent electrocution (SPR BIO-11).

Adverse effects on nesting birds can be avoided by conducting initial treatments between September 1 and December 31, outside of the nesting bird season (February 1 to August 31). Pre-treatment surveys would be combined with a focused nesting survey during nesting season (SPR BIO-10) to identify nests within the Project footprint and establish at minimum a 50-foot buffer, performed by qualified RPF or biologist. Nesting bird surveys would occur no more than 7 days prior to work to ensure that no nests would be disturbed during treatment activities. If work pauses for more than 7 days, a follow-up survey would be conducted by qualified RPF or biologist prior to the restarting of work. Appropriate survey areas would be determined by the qualified RPF or biologist depending on the Project footprint, type of activity proposed, and suitable habitat for nesting birds. Surveys would be conducted during periods of high bird activity (i.e., 1-3 hours after sunrise and 1-3 hours before sunset) and under suitable weather conditions for detecting nesting birds. If the RPF qualified biologist determines that visibility is significantly obstructed due to on-site conditions (e.g., access issues, rain, fog, smoke, or sound disturbance [including high wind]), surveys would be deferred until conditions are suitable for nest detection. Should the biologist encounter an active nest of a migratory bird species, the biologist would establish an avoidance buffer of at least 50 feet (SPR AD-2) until the nest is fledged or deemed inactive. If it is infeasible to avoid vegetation treatment within nesting season, only manual treatment would be permitted and the Project proponent will work closely with a RPF or biological monitor, which is consistent with SPR BIO-12. A biological monitor would be present on-site for work within the vicinity of raptor or eagle nests. No trees containing raptor nests would be removed.

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-2a, BIO-2b, BIO-3a, and BIO-4 would be implemented, including avoidance of protected aquatic features, targeted removal of non-native vegetation, strategic native vegetation removal to retain habitat function and prevent type conversion, and restriction of treatment activities to the non-nesting season if feasible to avoid impacts to nest success. If it is infeasible to avoid vegetation treatment within nesting season, only manual treatment would be permitted and a RPF or biological

monitor would be available during treatment activities. If work occurs within the vicinity of an active nest, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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." A biological monitor would be present on-site during work within the vicinity of raptor, eagle, or special-status bird nests. No trees containing raptor nests would be removed. Additionally, trees containing golden eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act.

With these additional focused MMs, impacts to nesting birds would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to Special-Status Bats: Pallid Bat, Townsend's Big-Eared Bat, and Western Red Bat*

Depending on the species present, the size of the roost, the type of roost (e.g., maternity, day, night, hibernation), and the season when tree removal would occur, the removal of trees and limbs could affect bats through removal of the roost and injury to bats. Tree removal activities could impact colonial bat species, which select a variety of trees and roost features, including cavities, crevices, and deep fissures in the wood or bark of trees and/or exfoliating bark. Indirect impacts to special-status bats include introduction of white-nose syndrome, modification or loss of roosting or foraging habitat, and disturbance to maternity roosts. Loud mechanical equipment used within the shaded fuel break could impact bat species roosting in buildings or structures in the area. Smoke from pile burning could also impact roosting bats by disturbing them during sleep, breeding, or hibernation.

The Project is designed to avoid riparian habitat and type-conversion of chaparral or coastal sage scrub (SPR BIO-5). Crew members and contractors would be trained to identify and avoid bat roosts if encountered (SPR BIO-2). If identified, active maternity or night roosts would be protected with an avoidance buffer (SPR AD-2). A Spill Prevention and Response Plan (SPR HAZ-5) would be developed as part of Project implementation, and the Project proponent would comply with herbicide application regulations (SPR HAZ-6) and restrict use of herbicide.

SPR BIO-10 requires focused surveys when working in potentially suitable habitat for special-status species, which includes roosting bats, and during maternity roosting season (April to July 31). Due to the difficulty of detecting bats during traditional daytime surveys, pre-treatment bat surveys would focus on identifying potential bat habitat and roosting structures. If potentially suitable roosting structures occur in Project areas, a qualified bat biologist would conduct a Level 1 survey (year-round) for evidence of bat occupation, specifically looking for signs of day-roosting such as fecal matter, staining, and carcasses. Based on the results of Level 1 surveys, day and night emergence Level 2 surveys would be performed (April 1 to September 15).

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-2a, BIO-2b, BIO-3a, and BIO-4 would be implemented, including avoidance of

protected aquatic features, targeted removal of non-native vegetation, strategic native vegetation removal to retain habitat function and prevent type conversion, and restriction of treatment activities to the non-breeding season as much as possible, to avoid impacts to bats and their insect prey base. If special-status bat roosts are identified during focused surveys, a no-disturbance buffer of 250 feet would be established around active pallid bat, Townsend's big-eared bat, and other special-status bat roosts, and mechanical treatments, manual treatments, and broadcast and pile burning would not occur within this buffer. MM BIO-2b also states: "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."

Bats may be excluded from roost locations by a qualified bat biologist or under the direct advisory of a qualified bat biologist from roosting structures in the work area only during the periods from mid-February until mid-April (hibernation), and from late August until mid-October (to avoid hibernation and maternity season). Bat elimination would follow BMPs and must include the combination of two actions: 1) careful blockage of all openings that are large enough to allow bats to enter, and 2) installation of one-way valves placed on the actively used openings to allow the bats to fly outside as they normally would but not to re-enter. After 7-10 days, the one-way valves are removed, and the remaining openings are blocked or sealed. Note that bats show a strong propensity to use any available openings to reclaim access to the roost when excluded and blockages must be performed with great thoroughness and attention to detail. Bat exclusions must be overseen by a qualified bat biologist.

With these additional focused MMs, impacts to special-status bats would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to San Francisco Dusky-Footed Woodrat*

Direct impacts could result in nest damage during manual or mechanical removal of middens or tree nests. Indirect impacts could include disturbing a woodrat from the safety of its nest, putting it at greater risk of predation and risking reproductive success.

Crews would be trained before the start of work to recognize woodrat nests and follow proper avoidance protocol (SPR BIO-2). If previously unknown nests are uncovered during work, crews would consult a biologist. Biologists would flag woodrat nest avoidance buffers during the pre-activity surveys (SPR AD-2). Pre-treatment surveys would be combined with a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify nest sites within the Project footprint. If a San Francisco dusky-footed woodrat nest is identified during focused surveys, a minimum 10-foot no-disturbance buffer would be established around the nest which would be assumed to be occupied. This buffer would include surrounding vegetation, including the vegetative canopy above the nest. The size of the buffer would be determined by the qualified RPF or biologist, and no treatment activities would occur within this buffer. If any individual of this species is detected during pre-activity surveys or work, the animal would be allowed to leave the area of its own volition.

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-2a, BIO-2b, BIO-3a, and BIO-4 would be implemented. MM BIO-2b flagging areas for nest avoidance and establishing no work-buffers. MM BIO-2b also states: "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."

Nests that are deemed hazardous by the Project proponent, such as those creating ladder fuels, may be dismantled under the supervision of a qualified biologist using a phased approach that allows woodrats to safely disperse. The following additional measures would be implemented to when dismantling a woodrat nest:

- Prior to any nest removal, safety measures would be employed to minimize potential human exposure to possible diseases carried by woodrats. Adequate protection, such as protective clothing, equipment and tools, gloves, and appropriate masks, to ensure safety regarding viruses and diseases potentially carried by rodents, is recommended.
- Vegetation immediately surrounding each nest to be removed would be cleared without disturbing the nest, to prevent displaced woodrats from taking cover in dense vegetation within the work area. All vegetation would be hauled off-site immediately. No brush piles or dense understory vegetation that could be used for cover by woodrats would be retained in the nest removal area after the nest is removed.
- Nest removal efforts would not take place during inclement or extreme weather conditions and would take place at dusk or dawn when woodrats are least susceptible to predators. Each nest would be carefully dismantled using hand tools (e.g., a rake and pitchfork).
- If a litter of young is found or suspected, the nest material would be replaced and the nest left alone for 2 to 3 weeks; after this time, the nest would be rechecked to verify that the young are capable of independent survival before proceeding with nest dismantling.

With these additional MMs, impacts to San Francisco dusky-footed woodrat would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

*Impacts to American Badger*

Direct impacts to American badger could result during manual or mechanical vegetation removal due to degradation of habitat around an active underground burrow or crushing the burrow. Indirect impacts could include a reduction in their prey base through crushing individuals, crushing burrows, or habitat loss.

The Project is designed to avoid type-conversion of chaparral or coastal sage scrub (SPR BIO-5), and creation of new roads (SPR HYD-2). SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated, would reduce the potential for Project activities to disturb burrows occupied by American badger and would reduce potential for impacts to this species.

Pre-treatment surveys would be combined with a focused survey (SPR BIO-1, SPR BIO-3, SPR BIO-10) to identify nest sites within the Project footprint. American badger burrows would be avoided entirely by an appropriate buffer. This buffer would include surrounding vegetation, including vegetative canopy above the burrow, as applicable.

Crews would be trained before the start of work to recognize American badger and burrows and follow proper avoidance protocol (SPR BIO-2). If previously unknown burrows are uncovered during work, crews would consult a biologist. Biologists would flag burrow avoidance buffers during the pre-activity surveys (SPR AD-2). During prescribed herbivory activities, wildlife-friendly fencing would be installed that would allow safe passage for American badger across the landscape (SPR BIO-11).

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-2a, BIO-2b, BIO-3a, and BIO-4 would be implemented. If American badger is detected during focused surveys or assumed present, a no-disturbance buffer would be established around the den or habitat assumed to be occupied, the size of which would be determined by the qualified RPF or biologist, and no treatment activities would occur within this buffer. MM BIO-2b also states: "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 any individual of this species is detected during pre-activity surveys or work, the animal would be allowed to leave the area of its own volition. With these additional focused MMs, impacts to American badger would be reduced to less than significant. This impact is consistent with the CalVTP PEIR.

Impact BIO-3

Riparian habitat and 33 sensitive natural communities have potential to occur within the Project footprint:

71.060.00 Coast live oak woodland and forest

71.060.26 *Quercus agrifolia – Arbutus menziesii – Umbellularia californica*

71.060.48 *Quercus agrifolia – Umbellularia californica*

71.060.08 *Quercus agrifolia/Artemisia californica*

71.100.00 Mixed oak forest and woodland

71.100.15 *Quercus agrifolia – Quercus garryana – Quercus kelloggii*

74.100.00 California bay forest and woodland

74.100.01 *Umbellularia californica*

74.100.09 *Umbellularia californica/Toxicodendron diversilobum*

71.040.00 Valley oak woodland and forest

61.810.00 Hinds's walnut and related stands

61.810.01 *Juglans hindsii/Sambucus nigra*

71.020.00 Blue oak woodland and forest

61.130.24 *Populus fremontii – Salix* (*laevigata, lasiolepis, lucida* ssp. *lasiandra*)

32.060.00 Coyote brush scrub

32.060.21 *Baccharis pilularis*/(*Nassella pulchra – Elymus glaucus – Bromus carinatus*)

32.015.00 California sagebrush – (purple sage) scrub

32.010.11 *Artemisia californica – Diplacus aurantiacus*

32.010.20 *Artemisia californica/Nassella (pulchra)*

37.940.00 Poison oak scrub

37.940.02 *Toxicodendron diversilobum – Artemisia californica/Leymus condensatus*

32.020.00 Black sage scrub

43.200.00 California poppy – lupine fields

43.200.02 *Lupinus bicolor*

41.081.00 Ashy ryegrass – creeping wildrye turfs

41.080.02 *Leymus triticoides – Bromus* spp. *– Avena* spp.

41.080.04 *Leymus triticoides – Carduus pycnocephalus – Geranium dissectum*

41.151.00 Needle grass - melic grass grassland

41.150.01 *Nassella pulchra – Lolium perenne* – (*Trifolium* spp.)

41.150.05 *Nassella pulchra – Avena* spp. *– Bromus* spp.

41.150.06 *Nassella pulchra – Erodium* spp. *– Avena barbata*

43.300.00 Popcorn flower fields

43.300.02 *Plagiobothrys nothofulvus – Castilleja exserta – Lupinus nanus*

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse impacts on sensitive habitats, including designated sensitive natural communities. Direct impacts on sensitive habitats include direct loss or degradation of habitat quantity or quality through vegetation removal. Indirect impacts include inadvertent introduction of invasive plant species or pathogens that would result in a habitat loss and degradation, and disturbance of the ecosystem through loss of species community members (flora or fauna) through repeated presence of human activities.

The potential for adverse effects to riparian or sensitive natural communities is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance resulting from implementing treatment activities are consistent with those analyzed in the

PEIR. Impacts to special-status wildlife would be reduced to less than significant with the following SPRs and MMs:

SPR AD-2: Delineate Protected Resources for Avoidance

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

SPR AD-5: Maintain Site Cleanliness

SPR BIO-1: Review and Survey Project-Specific Biological Resources and Determine Whether Avoidance is Possible

SPR BIO-2: Require Biological Resource Training for Workers

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats and Map Locations

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub

- Scrub habitat in the Project footprint is suitable Alameda whipsnake habitat, and work would be restricted to hand tools only. The nature of shaded fuel break work would not change habitat function for Alameda whipsnake dispersal, foraging and core scrub habitat. Alameda whipsnake core scrub habitat is described as shrub communities with a mosaic of open and closed canopy patches. USFWS defines scrub as coastal scrub, coyote brush scrub, or maritime chaparral areas (or "scrub") greater than 0.5 acre in size, or scrub areas above 0.2 acre in size that are within 50 feet of scrub patches greater than 0.5 acre in size (USFWS 2006). When work is occurring within core scrub habitat areas, the crew would work closely with the biologist to selectively remove scrub in a way that retains these dimensions, and therefore retains the overall habitat function while still serving the needs of the shaded fuel break. This technique has been used on previous projects and aims to provide a "scrub mosaic" that retains Alameda whipsnake habitat function. Scrub mosaic recommendations may vary depending on site conditions. The following techniques would be implemented during treatment:
    - Vegetation removal would occur in irregular, oblong shapes to maintain a natural condition.
    - Vegetation removal would avoid rocky outcroppings.
    - The overall dominant habitat type would not be converted.
    - Vegetation removal would focus on dead, woody materials, and invasive plants.

  Preliminary and post-treatment surveys would be conducted that would assess the condition and acreage of core scrub habitat. Post-treatment conditions would be assessed to ensure that there is no overall loss of habitat functionality within Alameda whipsnake core scrub.

It should be noted that scrub and chaparral are transitional habitat types and over time, canopy in these areas grows taller and denser, and larger tree species such as oak and madrone are naturally recruited and become increasingly dominant. Without any intervention, over a long period of time, chaparral and scrub communities would naturally be converted to woodland and forested habitat. Thoughtful treatment of select areas that retains scrub islands suitable for Alameda whipsnake core scrub is expected to be more effective in retaining key core scrub Alameda whipsnake habitat than complete avoidance of these areas.

SPR BIO-6: Prevent Spread of Plant Pathogens

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife

SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones

SPR BIO-3: Requires a survey for sensitive vegetation communities prior to treatment to ensure they are identified, and treatment avoids communities with a rank of S1 or S2.

Implementation of SPR BIO-1 and the survey required under SPR BIO-3 would ensure any riparian habitat, sensitive communities, or oak woodlands would be identified. In accordance with the Project description, all riparian areas would be avoided, and no work would occur within riparian habitats. Riparian habitats would be avoided with a 50-foot buffer, but buffers may be increased based on recommendations of a qualified biologist, and/or factors such as slope, existing erosion, sensitivity of the vegetative habitat, or presence of sensitive resources. SPR BIO-5 would ensure that treatment is designed to maintain or enhance habitat function of coastal scrub communities, and the Project is currently designed to create scrub islands to avoid type conversion. SPR BIO-6 requires that BMPs be employed to avoid the spread of plant pathogens; and SPR BIO-9 prescribes actions to prevent the spread of invasive plants.

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-3a would be implemented. Under MM BIO-3a, the qualified biologist would determine the natural fire regime, condition class, and fire return interval for each sensitive natural community and oak woodland type. Treatment activities in sensitive natural communities and oak woodlands would be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function.

MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands

The impact of the proposed Project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR. Impacts would be less than significant with mitigation, consistent with the PEIR.

<u>Impact BIO-4</u>

Aquatic resources were identified within the Project footprint as blue-line waters and ponds. Initial vegetation and maintenance treatments could result in direct or indirect adverse effects on state or federally protected wetlands. The potential for adverse effects to wetlands is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance resulting from implementing treatment activities are consistent with those analyzed in the PEIR. Impacts to wetlands would be reduced to less than significant with the following SPRs and MMs:

SPR AD-2: Delineate Protected Resources for Avoidance

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

SPR AD-5: Maintain Site Cleanliness

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife

SPR HAZ-5: Spill Prevention and Response Plan

SPR HAZ-6: Comply with Herbicide Application Regulations

SPR HYD-1: Comply with Water Quality Regulations

SPR HYD-2: Avoid Construction of New Roads

SPR HYD-3: Water Quality Protections for Prescribed Herbivory

SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones

SPR HYD-5: Protect Non-Target Vegetation and Special-Status Species from Herbicides

The aquatic habitat in the vicinity of the Project area has been excluded from the Project area during design of the treatments, and riparian habitat would be avoided at a minimum standard 50-foot buffer. Implementation of water quality protections in accordance with SPR HYD-1, identification of Watercourse and Lake Protection Zones (WLPZs) and establishing no-work buffers in accordance with SPR HYD-4 and SPR BIO-9, would minimize potential for invasive species spread in protected wetlands and riparian areas. With implementation of the SPRs described above, impacts to state and federally protected wetlands and riparian corridors from the treatment Project would be less than significant with mitigation incorporated.

MM BIO-4: Avoid State and Federally Protected Wetlands

Even following the above SPRs, Project impacts could still be considered potentially significant. Therefore, MM BIO-4 would be implemented. Avoidance of state and federally protected wetlands, per MM BIO-4, would ensure no impacts to wetlands in the identified features. With implementation of the above listed SPRs and MMs, riparian habitat and sensitive natural communities would be retained.

These impacts were found to be within the scope of the PEIR, and treatment activities proposed are consistent with those analyzed in the PEIR.

Impact BIO-5

The treatment areas have the potential to provide essential connectivity areas for wildlife. However, no known wildlife nursery sites or indications of nursery sites, such as deer-fawning habitat or potential rookery trees with whitewash, were identified within the Project area during the reconnaissance survey. Habitat within the treatment area may be used for movement (e.g., mule deer migration) and protective cover for common wildlife species. Noise during work may impede some movement, but work is generally within close proximity to urban landscapes and wildlife inhabiting the area are likely habituated to regular noise disturbance. Tree limb removal, hazardous tree removal, and ground-disturbing activities have the potential to impact nursery sites for native wildlife. Use of noise-generating equipment could disturb roosting birds and bats, impeding use of nursery sites.

Manual, mechanical, prescribed burning, and prescribed herbivory treatments could result in some limited direct or indirect adverse effects on wildlife corridors and nurseries. The potential for treatment activities to result in impacts to special wildlife corridors and nurseries was examined in the PEIR and was found to be less than significant with mitigation.

Due to the history of fire suppression and dense understory vegetative growth throughout much of the Project footprint, it is expected that wildlife corridors for some species would be improved by the treatment activities. By minimizing the potential for catastrophic wildfire and thereby protecting the forest ecosystem, the wildlife corridors, while slightly degraded in the short-term, would be protected from high-intensity wildfire in the future. Implementation of the SPRs and MMs listed below would minimize changes in habitat function within treatment areas that serve as wildlife-movement corridors:

SPR AD-2: Delineate Protected Resources for Avoidance

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

SPR AD-5: Maintain Site Cleanliness

SPR BIO-1: Review and Survey Project-Specific Biological Resources and Determine whether Avoidance is Possible

SPR BIO-2: Require Biological Resource Training for Workers

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats and Map Locations

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub

SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites

SPR BIO-11: Install Wildlife-Friendly Fencing During Prescribed Herbivory

SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones

SPR HYD-5: Protect Non-target Vegetation and Special-Status Species from Herbicides

Existing habitat would remain to permit movement of wildlife species. Vegetation management activities would not block or obstruct streams or creeks. SPR BIO-10 would generally apply to many areas where special-status species could occur. During prescribed herbivory activities, wildlife-friendly fencing would be installed that would allow safe passage for common wildlife across the landscape (SPR BIO-11). With implementation of the above listed SPRs, areas of intact wildlife corridors would be retained. These impacts were found to be within the scope of the PEIR, and treatment activities proposed are consistent with those analyzed in the PEIR.

MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites

Even following the above SPRs, wildlife nursery sites could still be significantly impacted if not avoided. Therefore, MM BIO-5 would be implemented. If wildlife nursery sites are identified during surveys conducted pursuant to SPR BIO-10, MM BIO-5 would apply. This MM requires that nursery habitat be marked for avoidance during treatment activities and a non-disturbance buffer be installed around the nursery site if activities are required to occur while the site is active or occupied.

Impacts would be less than significant with mitigation, consistent with the PEIR.

Impact BIO-6

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

The potential for adverse effects to special-status wildlife species is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance resulting from implementing treatment activities are consistent with those analyzed in the PEIR. Impacts to special-status wildlife would be reduced to less than significant with the following SPRs and MMs (Attachment A). In addition to the CalVTP PEIR SPRs and MMs, additional Project-specific measures are described below each applicable measure:

SPR AD-2: Delineate Protected Resources for Avoidance

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

SPR AD-5: Maintain Site Cleanliness

SPR BIO-1: Review and Survey Project-Specific Biological Resources and Determine Whether Avoidance is Possible

SPR BIO-2: Require Biological Resource Training for Workers

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats and Map Locations

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub

SPR BIO-12: Protect Common Nesting Birds, Including Raptors Through the Use of Avoidance Buffers, Treatment Modification, or Treatment Delay. Monitor Active Raptor Nest During Treatment and Retain Raptor Nest Trees

Regarding general common wildlife, implementation of SPR BIO-1, SPR BIO-2, SPR BIO-3, and SPR BIO-5 would limit the loss and degradation of high-quality habitat for common species within the Project site. SPR BIO-2 would require worker training in sensitive biological resources; SPR BIO-3 would ensure mapping of sensitive habitats; SPR BIO-5 would result in avoidance of type-conversion in scrub habitats. Therefore, Project treatment would remove vegetation and alter habitat structure locally but would not result in permanent habitat degradation or conversion.

The potential for adverse effects on common wildlife, including nesting birds, is within the scope of the PEIR because the treatment activities and extent of expected disturbance as a result of implementing vegetation treatments, including maintenance treatments, are consistent with those analyzed in the PEIR. The implementation of SPRs BIO-1, BIO-2, BIO-3, BIO-5, and BIO-12, in addition to measures described for special-status species under Impact BIO-1, BIO-2, BIO-3, and BIO-5, would reduce the risk of this Project, resulting in less than significant adverse effects to habitat and the abundance of common wildlife.

The potential for treatment activities, including maintenance treatments, to result in adverse effects on these resources was examined in the PEIR and was found to be less than significant.

Impact BIO-7

Local policies or ordinances would apply to resources that occur within the proposed Project area, particularly tree ordinances or noise ordinances. The potential for treatment activities to result in conflict with local policies or ordinances was examined in the PEIR. The potential for the proposed Project to conflict with local policies or ordinances is within the scope of the activities and impacts addressed in the PEIR because the treatment projects implemented under the CalVTP are required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures related to protection of biological resources.

SPR AD-3: Consistency with Local Plans, Policies, and Ordinances

Additionally, SPR AD-3 (Consistency with Local Plans, Policies, and Ordinances) requires that the Project proponent design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans), policies, and ordinances to the extent the Project is subject to them. (See

Section 4: Regulatory Setting for more information.) Impacts would be less than significant and consistent with the PEIR.

Impact BIO-8

The CalVTP recognized eight (8) Habitat Conservation Plans (HCPs) and/or Natural Community Conservation Plans (NCCPs) in the planning or implementation phase in the Central California Coast Section. In addition, the EBMUD Low Effect East Bay HCP lies within the Central California Coast Section and west of the Project area. The proposed Project does not fall under the jurisdiction of any known HCPs or NCCPs; therefore, this impact does not apply to the treatment areas.

New Biological Resources Impacts

The proposed treatments are consistent with the treatment types and activities evaluated in the CalVTP PEIR. The Project proponent has considered the site-specific characteristics of the Project area and has determined they are consistent with the environmental and regulatory settings discussed in the PEIR. The Project proponent has also determined that the inclusion of the portion of the Project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental and regulatory conditions pertinent to biological resources that are present within the treatable landscape are essentially the same as those areas outside the treatable landscape. Therefore, the impacts of the proposed Project are also consistent with those covered in the PEIR. No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact to biological resources would occur.

## 4.6 Geology, Soils, Paleontology, and Mineral Resources

Table 8. Consistency of Project-Related Geology, Soils, Paleontology, and Mineral Resources Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.6.1 Discussion*

The Project area is located in Contra Costa County, within the Southern Coast Ranges Geomorphic Province, which is characterized by northwest trending mountain ranges and valleys. The Coast Ranges are primarily composed of Jurassic- to Cretaceous-age (about 65-150 million years old) marine sedimentary and volcanic rocks of the Franciscan assemblage. The Franciscan assemblage consists of partially metamorphosed greenstone, basalt, chert, and graywacke that originated as sea floor sediments. The California Department of Conservation Landslide Inventory map was reviewed to identify unstable areas within or in proximity to the treatment areas. No historic or active landslides have been documented within the treatment areas (California Department of Conservation 2023b). Soils within the treatment areas are dominated by Lodo clay loam, 30 to 50 percent slopes (37.8 percent), and Sehorn clay, 15 to 30 percent slopes (22.1 percent). Other soils make up smaller percentages of the

project footprint such as Los Osos clay loam, 30 to 50 percent slops (6.9 percent), and Lodo clay loam, 50 to 75 percent (6.5 percent) (Natural Resources Conservation Service [NRCS] 2023). Table 3 below shows all soil types present within the footprint of the treatment areas. The parent material for these soils consists of sandstone and shale, and these soils are well drained (NRCS 2023). The erosion hazard for the soils ranges from slight to severe (NRCS 2023). As stated in the Project Description, mechanical treatments would occur but would mainly be used on slopes below 40 percent grade. No mechanical treatment would occur on slopes greater than 50 percent.

**Table 9**. Soil Types and Percentages within the Project Area.

| Soil Type | Acres | Percent of Total Footprint |
|---|---|---|
| Briones loamy sand, 30 to 50 percent slopes | 4.3 | 1.4% |
| Clear Lake clay, 0 to 15 percent slopes, Major Land Resource Area (MLRA) 15 | 4.1 | 1.4% |
| Cropley clay, 2 to 5 percent slopes | 13.4 | 4.5% |
| Cut and fill land-Los Osos complex, 9 to 30 percent slopes | 0.2 | 0.1% |
| Cut and fill land-Millsholm complex, 30 to 50 percent slopes | 5.2 | 1.7% |
| Diablo clay, 15 to 30 percent slopes, MLRA 15 | 0.4 | 0.1% |
| Lodo clay loam, 30 to 50 percent slopes, very rocky, MLRA 15 | 113 | 37.8% |
| Lodo clay loam, 50 to 75 percent slopes, very rocky, MLRA 15 | 19.4 | 6.5% |
| Los Osos clay loam, 15 to 30 percent slopes | 5.4 | 1.8% |
| Los Osos clay loam, 30 to 50 percent slopes | 20.8 | 6.9% |
| Los Osos-Los Gatos complex | 12.8 | 4.3% |
| Millsholm loam, 15 to 50 percent slopes, moist, MLRA 15 | 7.2 | 2.4% |
| Millsholm loam, 20 to 60 percent slopes, moist, MLRA 15 | 15.4 | 5.2% |
| Rock outcrop-Xerorthents association | 10.6 | 3.5% |
| Sehorn clay, 30 to 50 percent slopes | 66.1 | 22.1% |
| Tierra loam, 2 to 9 percent slopes, MLRA 14 | 0.8 | 0.3% |
| **Totals** | **299.0** | **100.0%** |

*Source: NRCS 2023.*

Impact GEO-1

The proposed Project would include manual and mechanical treatments, prescribed herbivory, prescribed burning, and applied herbicide. These activities would create soil disturbance and vegetation removal, which have the potential to create erosion and the loss of topsoil. The potential impacts fall within the scope of the PEIR because the proposed work activities are similar to those analyzed in the PEIR. The PEIR identified the potential for Project treatments to cause a substantial erosion or loss of topsoil as less than significant. Implementation of SPRs GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6,

GEO-7, HYD-3, HYD-4, AQ-3, and AQ-4 would further minimize the risk of soil disturbance and the removal of topsoil caused by Project treatments. SPR GEO-1 would require that soil disturbing activities are put on hold during precipitation; SPR GEO-2 would limit the use of vehicles with high ground pressure that could lead to soil disturbance or compaction on wet or saturated soils; SPR GEO-3 would require disturbed soil areas to be stabilized during treatment activities; SPR GEO-4 would require treatment areas be inspected for correct erosion control measures prior to the start of the rainy season and following the first large rain event; SPR GEO-5 would require stormwater be drained using water breaks to decrease the potential for channelized erosion down linear treatment areas; SPR GEO-6 would require that the size of burn piles is minimized in order to limit the spatial extent of damage done to soil; SPR GEO-7 would minimize erosion resulting from the use of heavy equipment and herbivory that is prescribed on slopes; SPR HYD-3 would require that environmentally sensitive areas are identified and excluded from all prescribed herbivory; SPR HYD-4 would require the establishment of WLPZs in order to reduce erosion near streams; SPR AQ-3 would require the creation of a Burn Plan and would minimize the severity of soil burn to reduce the potential for runoff and soil erosion; and SPR AQ-4 would require that unpaved dirt roads are wetted in order to control dust.

The proposed treatment area includes land that is outside of the CalVTP treatable landscape. While this constitutes as a change to the geographic extent that is outlined in the PEIR, the slopes and soil characteristics of the Project area are equivalent within and outside the treatable landscape. However, SPRs would be implemented as described above, which would limit the potential for erosion to occur. For that reason, the potential impact related to soil erosion is also the same, as described above. This determination is therefore consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact GEO-2

Proposed treatment activities such as vegetation removal and prescribed burning which limit vegetative cover and impact root systems could diminish the stability of soils, potentially increasing the risk of landslides. The PEIR identified the potential for treatment activities to increase the risk of landslides as less than significant. Because the treatments being proposed are analyzed in a manner consistent with the treatments in the PEIR, the potential impact falls within the PEIR scope. Additionally, implementing SPRs GEO-1, GEO-3, GEO-4, GEO-7, and AQ-3 would minimize the potential for landscapes created by Project treatments. SPR GEO-1 would require that soil disturbing activities are put on hold during precipitation; SPR GEO-3 would require treatment areas be inspected for correct erosion control measures prior to the start of the rainy season and following the first large rain event; SPR GEO-4 would require that treatment areas be inspected for proper erosion control measures; SPR GEO-7 would minimize erosion resulting from the use of heavy equipment and herbivory that is prescribed on slopes; and SPR AQ-3 would minimize the severity of soil burn to reduce the potential for landslides caused by the destabilization of root structures and the loss of vegetative cover.

As discussed in Impact GEO-1, the proposed treatment area includes land that is outside of the CalVTP treatable landscape. While this constitutes a change to the geographic extent that is outlined in the

PEIR, the slopes and landslide conditions of the Project area that are within the treatable landscape are equivalent to the areas outside of it. SPRs would also be implemented as described above. For these reasons, the potential impact related to the risk of landslides would not differ from what was discussed in the CalVTP. Therefore, proposed treatments outside of the original area covered in the CalVTP treatable landscape would not constitute a substantially more severe significant impact than what was analyzed in the PEIR.

New Geology, Soils, Paleontology, and Mineral Resource Impacts

The proposed treatments are consistent with the treatment types and activities evaluated in the CalVTP PEIR. The Project proponent has considered the site-specific characteristics of the proposed treatment Project and has determined they are consistent with the environmental and regulatory settings discussed in the PEIR. The Project proponent has also determined that the inclusion of the portion of the Project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental and regulatory conditions pertinent to geology and soils that are present within the treatable landscape are essentially the same as those areas outside the treatable landscape. Therefore, the impacts of the proposed Project are also consistent with those covered in the PEIR. No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact to geology and soils would occur.

## 4.7 Greenhouse Gas Emissions

**Table 10**. Consistency of Project-Related Greenhouse Gas Emissions Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.7.1 Discussion*

Impact GHG-1

Vegetation treatments would involve manual and mechanical vegetation removal, prescribed burning, prescribed herbivory, and herbicide application, and biomass disposal would include chipping and pile burning, all of which would generate some GHG emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR and found to be less than significant. The Project would be consistent with the applicable policies, plans, and regulations to reduce GHG emissions as described in California's 2022 Climate Change Scoping Plan (CARB 2022), the California Forest Carbon Plan (Forest Climate Action Team 2018), and the Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (CARB 2019). Since the Project is consistent with the latest Climate Change Scoping Plan measures, it is on target to achieve the legislated GHG emission target for 2030 and substantially advance toward the 2050 climate

goals. It would also be consistent with the Contra Costa County Climate Action Plan (Contra Costa County and Michael Baker International 2015), which contains GHG reduction strategies and policies and details impacts of worsening wildfires on public health. Additionally, it would be consistent with the Contra Costa County General Plan (Contra Costa County 2005), which contains goals and policies relating to fire protection and wildland fire prevention through the use of controlled burns, fuel removal, and fuel breaks. The City of Lafayette has an Environmental Action Plan (City of Lafayette, n.d.) which describes measures for the community to reduce GHG emissions and the Project would be consistent with this plan. Finally, it would be consistent with the City of Walnut Creek Sustainability Action Plan (City of Walnut Creek 2023), which contains GHG reduction strategies and policies and also describes measures to decrease community vulnerabilities to climate change hazards, including increased wildfire. Impacts related to GHG emissions from these types of treatment activities are within the scope of the PEIR because the proposed activities, as well as the associated equipment, duration of use, and resultant GHG emissions are consistent with those analyzed in the PEIR, which were found to be less than significant. SPR GHG-1 is not applicable to the proposed Project, as the Project is not subject to the requirement to provide information to inform reporting under the Board of Forestry and Fire Protection's AB 1504 Carbon Inventory Process because this Project is not a registered offset project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the same plans, policies, and regulations adopted to reduce GHG emissions apply in the areas outside the treatable landscape as well as in areas within the treatable landscape; therefore, the GHG impact is also the same as described above.

Impact GHG-2

The use of vehicles and mechanical equipment, prescribed herbivory, herbicide application, and prescribed burning during initial and maintenance treatments would result in GHG emissions. However, these treatments would have relatively low GHG emissions compared to GHG emissions from catastrophic wildfires. Wildfire hazards, including wildfire intensity and rate of spread could be somewhat reduced through implementation of the Project. The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR and found to be potentially significant and unavoidable. This impact is within the scope of the PEIR 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 PEIR. MM GHG-2 would be implemented and would reduce GHG emissions associated with pile burning by burning when fuels have a higher fuel moisture content, reducing the total area burned by mosaic burning and isolating and leaving large fuels unburned, and by scheduling burns before new fuels appear. Treatment activities would contribute to annual GHG emissions generated under the CalVTP, and this impact would fall

within the finding of the PEIR of potentially significant and unavoidable. Methods for reducing GHG emissions from burns would be integrated into SPR AQ-3 (Burn Plan) as described in MM GHG-2.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR and the added acreage would not expand the total annual acreage proposed for treatment under the PEIR of 250,000 acres per year. However, GHG emissions and associated climate change impacts are global in nature and are not contained within the boundary of the treatable areas. Therefore, the GHG impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Impacts Related to GHG Emissions

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatments and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (Section 3.8.1, Regulatory Setting, and Section 3.8.2, “Environmental Setting” in Volume II of the Final PEIR).

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent of the PEIR. However, the same plans, policies, and regulations adopted to reduce GHG emissions apply in the areas outside the treatable landscape as within it. Likewise, the climate conditions are the same within the treatable landscape as they are just outside of it for this Project. Therefore, impacts of the proposed Project are also consistent with those covered in the PEIR. No changed circumstances are present, and since the added acreage would not expand the total annual acreage proposed for treatment under the PEIR of 250,000 acres per year, the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. No new impact related to GHG emissions would occur.

## 4.8 Energy Resources

**Table 11.** Consistency of Project-Related Energy Resources Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.8.1 Discussion*

Impact ENG-1

The use of vehicles and mechanical equipment during initial treatment and treatment maintenance activities would result in the consumption of energy in the form of fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the PEIR and found to be less than significant. The consumption of energy during implementation of the treatment project is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the PEIR. Diesel and petroleum-based fuels, such as gasoline, would be consumed from the use of heavy-duty equipment and trucks, mechanical equipment, and the transport of personnel and equipment to and from and within the Project site. The primary objective of the Project is to reduce and manage wildfire hazard risk, intensity, and potential rate of spread. Wildfire response requires an immediate response from emergency personnel and mobilization of equipment from across the state and even across the nation, which often results in inefficient consumption of energy. Implementation of treatment activities would reduce wildfire risk and the intensity of fire responses.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental and regulatory conditions are essentially the same within and outside the treatable landscape, and the types of treatment activities and associated use of energy are of the same scale and scope as analyzed in the PEIR; therefore, the energy impact is also the same. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

New Energy Resource Impacts

The Project proponent has considered the site-specific characteristics of the proposed treatment Project both inside and outside the treatable landscape and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (Sections 3.9.1, “Regulatory Setting” and 3.9.2, “Environmental Setting” in Volume II of the Final PEIR), since the added acreage would not expand the total annual acreage proposed for treatment under the PEIR of 250,000 acres per year. Therefore, the impacts of the proposed Project are consistent with those considered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to energy resources would occur.

## 4.9 Hazardous Materials, Public Health, and Safety

**Table 12**. Consistency of Project-Related Hazardous Materials, Public Health, and Safety Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.9.1 Discussion*

Impact HAZ-1

The Project would involve mechanical treatments, manual treatments, prescribed herbivory, herbicide application, and prescribed burning. These activities would require the use of various types of equipment and vehicles, which require the use of fuels, oils, and lubricants, which are hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was analyzed in the PEIR and the impacts were found to be less than significant. This impact is within the scope of the PEIR because the types of treatments and associated equipment

and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. All equipment associated with the proposed project would comply with SPR HAZ-1, which ensures that equipment is properly maintained to minimize leaks. SPR HAZ-5 also ensures that proper spill prevention measures would be implemented on-site to prevent impacts related to the accidental leak or spill of hazardous materials. Herbicide application impacts are discussed under Impact HAZ-2, below.

The proposed treatment area includes land that is outside of the CalVTP treatable landscape. While this constitutes as a change to the geographic extent that is outlined in the PEIR, regulatory conditions and the use of hazardous materials are essentially the same within and outside the treatable landscape. Therefore, the impact related to the use of hazardous materials is also the same. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HAZ-2

The Project would include herbicide application to control species that increase wildfire hazards. Herbicide application would involve transportation, use, storage, and disposal of herbicides, which could result in risks related to human exposure when applied in areas in close proximity to the public. However, only ground-level application would occur; no aerial spraying or spraying of herbicides from trucks would occur. The PEIR found the potential for treatment activities to create a significant health hazard from the use of herbicides to be less than significant. The potential impacts related to the use of herbicides during treatment activities are within the scope of the activities and impacts discussed within the PEIR because the types of herbicides (e.g., glyphosate and species-specific chemicals), as well as application methods that would be used, which are limited to ground-based applications, are consistent with those analyzed in the PEIR. Herbicides may be applied sparingly and strategically (by hand or backpack sprayer) to invasive plants and noxious weeds to minimize the spread and eliminate re-sprouting of invasive species to reduce wildfire risk within the treatment areas. Under the CalVTP, herbicide treatments would be limited to ground-level application and must comply with all US EPA label directions as well as be applied by licensed applicators in compliance with all laws and regulations. The Project would comply with SPR HAZ-5 through HAZ-9, which require preparation of a Spill Prevention and Response Plan prior to any herbicide treatment activities to provide protection to workers, the public, and the environment from accidental spills or leaks of herbicides; compliance with herbicide application regulations to protect worker and public safety; triple rinsing herbicide containers and disposal of rinsed materials at an approved site and disposal of all herbicides following label requirements and waste disposal regulations; minimization of herbicide drift into public areas through application parameters such as limitations for nozzle pressure and nozzle distance from vegetation; and notification of herbicide application within 500 feet of public areas by posting signs at herbicide treatment areas. Herbicide application would not take place within 24 hours of a rain event.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the exposure potential to

herbicides is essentially the same within and outside the treatable landscape. Therefore, the impact related to the potential for the Project to result in a significant health hazard from the use of herbicides is also the same. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HAZ-3

The Project would include mechanical treatments that could result in ground disturbance, which could expose workers, the public, or the environment to hazardous materials if a contaminated site is present within the Project area. Additionally, prescribed burning activities could lead to unexpected ignitions should ignitable hazardous waste be present, which could expose workers to risks associated with unexpected fire or explosions. The PEIR identified the potential for treatment activities to encounter contaminated sites that could expose workers, the public, or the environment to hazardous materials as potentially significant. This impact was identified as potentially significant in the PEIR because hazardous materials sites could be present within treatment sites, and soil disturbance or burning in those areas could expose people or the environment to hazards. In evaluating the potential for effects related to the proposed project, database searches for hazardous materials sites within the Project area were conducted as directed by MM HAZ-3. Six hazardous materials sites were identified within 0.25 mile of the treatment Project area, listed below (California Department of Toxic Substances Control [DTSC] 2023).

- Chevron (T0601300733), located approximately 0.22 mile from the shaded fuel break treatment area along Tice Valley Road, was identified as a leaking underground storage tank (LUST) with multiple potential contaminants of concern such as benzene and dichloroethane. The site is still open today, however, has a path to closure plan in place (SWRCB 2023a).
- Golden Rain Foundation (T0601300412) was identified 0.19 miles from the shaded fuel break treatment area, adjacent to Rockview Drive. It is a LUST that was listed for diesel as a potential contaminant and was certified as cleaned up in 1997 (SWRCB 2023b).
- Saint Mary's College (T10000009044) is located approximately 0.25 miles away from the southwestern treatment area at Saint Mary's College along De La Salle Drive. A LUST was identified, potentially contaminating the site with oil and petroleum; however, the site was cleaned up and the case was closed in 2017 (SWRCB 2023c).
- Saint Mary's College (Saint Joseph's Hall) (T10000010124) was identified within approximately 0.25 mile of the southwestern treatment area at Saint Mary's College along De La Salle Drive. A LUST was identified, potentially contaminating the site with diesel, gasoline, and petroleum; however, the site was cleaned up and the case was closed in 2022 (SWRCB 2023d).
- UDC Homes (T0601300313) was identified within approximately 0.09 mile of the shaded fuel break treatment area, just east of Rossmoor. This site consists of open space and is located

adjacent to Rossmoor Parkway. The site was marked as a LUST for the contaminant gasoline and was certified as cleaned up in 1997 (SWRCB 2023e).

- Unocal (T0601300331) was identified approximately 0.20 mile away from the shaded fuel break treatment area, at the corner of Tice Valley Road and Rossmoor Parkway. The site is located within a paved commercial lot near a business. The site was listed as a LUST, with gasoline listed as a potential contaminant of concern, but was certified as cleaned up in 1996 (SWRCB 2023f).

None of the listed hazardous sites are located within the treatment areas and all but one of the sites have been cleaned up and the cases closed. In addition, the proposed Project would not involve ground disturbance outside of the Project area that would have the potential to disturb contaminated sites. Therefore, this impact is less than significant. No SPRs are applicable to this impact and no additional mitigation is required.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the potential to encounter hazardous materials and the regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Therefore, the hazardous materials impact related to exposing the public or environment to hazards from disturbance of known hazardous material sites is also the same. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

<u>New Hazardous Materials, Public Health, and Safety Impacts</u>

The Project is consistent with the treatment types and activities considered in the CalVTP PEIR. The Project proponent has considered all site-specific characteristics of the proposed Project and determined that they are in compliance with the applicable environmental and regulatory setting conditions presented in the CalVTP PEIR (Volume II, 3.10.1 and 3.10.2). The Project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing environmental and regulatory conditions pertinent to hazardous materials that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Therefore, the impacts are the same and the impacts of the proposed Project are also consistent with those covered in the PEIR. No changed circumstances would create new significant impacts not addressed in the PEIR and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to hazardous materials, public health, or safety would occur.

## 4.10 Hydrology and Water Quality

**Table 13.** Consistency of Project-Related Hydrology and Water Quality Impacts with the Scope of the CalVTP PEIR.

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

| Impact in the PEIR | | | Project-Specific Checklist | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Environmental Impact Covered in the PEIR** | **Identify Impact Significance in the PEIR** | **Identify Location of Impact Analysis in the PEIR** | **Does the Impact Apply to the Treatment Project?** | **List SPRs Applicable to the Treatment Project[1]** | **List MMs Applicable to the Treatment Project[1]** | **Identify Impact Significance for Treatment Project** | **Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?** | **Is this Impact Within the Scope of the PEIR?** |
| **Would the project:** | | | | | | | | |

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.10.1 Discussion*

Impact HYD-1

Project treatments may include prescribed burning in the form of low intensity surface fires. Ash and debris from treatment areas could be washed by runoff into adjacent drainages and streams. The PEIR identified the potential for any prescribed burning treatment areas to impact water quality regulations or degrade water quality due to the creation of runoff which transports ash and debris as less than significant. This impact falls within the scope of the PEIR because the use of pile burning and prescribed low-intensity surface fires and all associated impacts to water quality are consistent with what is analyzed in the PEIR. SPRs applicable to this treatment are AD-3, AQ-3, HYD-1, HYD-4, HYD-6, and GEO-4 through GEO-7. SPR AD-3 requires that the treatment design be consistent with local plans, policies, and ordinances and SPR AQ-3 requires a Burn Plan. SPRs GEO-4 through GEO-7 require erosion monitoring, draining stormwater with water breaks where appropriate, and minimizing burn pile size. SPRs HYD-1, HYD-4, and HYD-6 require that the treatments comply with all water quality regulations, WLPZs ranging from 50 to 150 feet be implemented for watercourses that are within treatment areas, and burn piles are located outside of WLPZs.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. There is one waterbody, Tice Creek, that is located in close proximity to the southernmost extent of the shaded fuel break treatment area and is outside the CalVTP treatable landscape. Additionally, the southwestern treatment area is located near portions of Las Trampas Creek that are outside the treatable landscape. However, the areas just upstream and downstream of Las Trampas Creek are within the treatable landscape. Similarly, while a segment of the shaded fuel break that is outside the CalVTP treatable landscape is located near Grizzly Creek, areas both upstream and downstream of Grizzly Creek are within the CalVTP treatable landscape

boundary. The surface water conditions of the Project area boundary are essentially the same within and outside the treatable landscape; therefore, the water quality impact from prescribed burning is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-2

This Project would include both manual and mechanical treatments. Any watercourses that are within treatment areas pursuant to SPR HYD-4 would have WLPZs ranging from 50 to 150 feet. The PEIR found that the potential for manual and mechanical treatments to violate water quality regulations or degrade water quality is less than significant. Because the use of heavy equipment and handheld tools to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR, this impact falls within the scope of the PEIR. SPRs applicable to this treatment are AD-3, HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-4, GEO-7, BIO-1, and HAZ-1. SPRs AD-3, HYD-1, HYD-4, HYD-6, and GEO-4 through GEO-7 are described under Impact HYD-1. SPRs GEO-1 through GEO-3 require the suspension of soil-disturbing treatment activities during precipitation, limit high ground pressure vehicles that could cause soil disturbance or compaction on wet or saturated soils, and require stabilization of disturbed soil areas during treatment activities. SPR HYD-2 ensures that the construction of new roads would be avoided. SPR BIO-1 requires the review and survey of specified biological resources, including riparian areas. SPR HAZ-1 requires that all equipment be maintained and regularly inspected for leaks.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. As mentioned in Impact HYD-1, a few segments of the Project treatment areas that are located outside the CalVTP treatable landscape are in close proximity to waterbodies entirely or partially outside the treatable landscape boundary. However, within the boundary of the Project area, the surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from manual and mechanical treatments is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-3

Project treatments would include prescribed herbivory to reduce fuel loads and may be used for treatment maintenance or as a pre-treatment before implementation of other methods. The prescribed herbivory livestock used as part of the proposed Project would typically involve use of cattle, goats, and other grazing animals; under the CalVTP, this could also include horses and may require the installation of temporary fencing where natural barriers are not present. The use of temporary water facilities for the livestock and guard animals and/or shepherd, as well as other temporary infrastructure (e.g., tanks, corrals, wildlife-safe fences), may be required with the use of prescribed herbivory as a treatment method. The potential for prescribed herbivory treatment activities to violate water quality regulations

or degrade water quality was examined in the PEIR and was found to be less than significant. SPRs applicable to this treatment are AD-3, BIO-1, BIO-4, BIO-5, GEO-1, GEO-3, GEO-4, GEO-7, HYD-1, HYD-2, HYD-3, HYD-4, HYD-6, and HAZ-1. All applicable SPRs listed, except SPRs BIO-4, BIO-5, GEO-3, and HYD-3, are described in Impact HYD-1 and Impact HYD-2. SPRs BIO-4 and BIO-5 require that treatment design avoid loss of riparian habitat function and avoid the type conversion of chaparral and coastal sage scrub habitat. SPR GEO-3 requires stabilization of soil disturbed during prescribed herbivory treatments, and HYD-3 requires various water quality protections for prescribed herbivory treatments. These SPRs avoid and minimize the risk of substantial water quality degradation by implementation of prescribed herbivory treatment, making the impact less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape. As mentioned in Impact HYD-1, a few segments of the Project treatment areas that are located outside the CalVTP treatable landscape are in close proximity to waterbodies entirely or partially outside the treatable landscape boundary. However, within the boundary of the Project area, the surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from prescribed herbivory treatments is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-4

Project treatments could include targeted herbicide application to kill, or prevent regrowth of, invasive plants and noxious weeds. No aerial spraying of herbicides would occur. Herbicides would be applied in adherence with all US EPA, CalEPA, and California Department of Pesticide Regulation guidelines. The use of herbicides has the potential to violate water quality standard regulations or degrade water quality, which was examined in the PEIR, and was found to be less than significant. SPRs applicable to this treatment are AD-3, BIO-1, BIO-4, GEO-1, HAZ-1, HAZ-5, HAZ-6, HAZ-7, HYD-1, HYD-4, and HYD-5. All applicable SPRs listed, except SPRS HYD-5, HAZ-5, HAZ-6, and HAZ-7, are described in Impacts HYD-1 through Impact HYD-3. SPR HYD-5 prohibits non-aquatic herbicide formulations from being applied within 50 feet of a waterbody or riparian area and prohibits application during precipitation or within 24 hours of forecasted precipitation. SPRs HAZ-5, HAZ-6, and HAZ-7 ensure that a spill prevention and response plan is implemented, that herbicide application regulations are followed, and that herbicide containers are triple rinsed. These SPRs avoid and minimize the risk of substantial water quality degradation by implementation of herbicide treatment, thereby making the impacts less than significant.

The inclusion of land in the Project that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. As mentioned in Impact HYD-1, a few segments of the Project treatment areas that are located outside the CalVTP treatable landscape are in close proximity to waterbodies entirely or partially outside the treatable landscape boundary. However, within the boundary of the Project area, the existing environmental conditions present in the areas outside the

treatable landscape are essentially the same as those within the treatable landscape because they have similar environmental conditions and the same regulatory setting. Potential impacts outside the treatable area are within the scope of the activities and impacts addressed in the PEIR because the methods of herbicide application, transportation, storage, and disposal are consistent with those analyzed in the PEIR with implementation of the same SPRs. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact HYD-5

Some of the Project treatments could cause ground disturbance and minor erosion, which could directly or indirectly modify existing drainage patterns. The PEIR analyzed the potential for treatments to violate water quality standard regulations or degrade water quality, and the impacts were found to be less than significant. As described in the PEIR, these activities would have minor impacts to on-site drainage with implementation of SPRs. The potential impacts are within the scope of the activities and impacts addressed in the PEIR because the use of equipment and treatment activities are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are AD-3, BIO-4, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, HYD-1, HYD-2, HYD-4, and HYD-6. All applicable SPRs listed are described in Impacts HYD-1 through HYD-4. These SPRs would avoid and minimize the risk of substantial alteration of the existing drainage pattern, thereby making the impact less than significant.

The inclusion of land that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. As mentioned in Impact HYD-1, a few segments of the Project treatment areas that are located outside the CalVTP treatable landscape are in close proximity to waterbodies entirely or partially not outside the treatable landscape boundary. However, within the boundary of the Project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, and existing drainage patterns pass through both areas. Therefore, the impact related to alteration of site drainage patterns is also the same. The potential for those treatments to substantially alter the existing drainage patterns of a Project site was evaluated in the PEIR and was found to be less than significant with implementation of the same SPRs. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Hydrology and Water Quality Impacts

All proposed treatments are consistent with the treatment types and activities addressed in the PEIR. The site-specific characteristics of the proposed treatment Project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (Sections 3.11.1, “Regulatory Setting” and 3.11.2, “Environmental Setting” in Volume II of the Final PEIR). The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the hydrology, water quality, and treatment methods are consistent with those analyzed in

the PEIR; thus, they are also within the scope of the PEIR. Additionally, the existing environmental and regulatory conditions pertinent to hydrology and water quality are also consistent within as well as outside of the treatable landscape included in this Project area. No changed circumstances would create new significant impacts not addressed in the PEIR and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to hydrology and water quality would occur.

## 4.11 Land Use and Planning, Population, and Housing

**Table 14.** Consistency of Project-Related Land Use and Planning, Population, and Housing Impacts with the Scope of the CalVTP PEIR.

| Impact in the PEIR | | | Project-Specific Checklist | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Environmental Impact Covered in the PEIR** | **Identify Impact Significance in the PEIR** | **Identify Location of Impact Analysis in the PEIR** | **Does the Impact Apply to the Treatment Project?** | **List SPRs Applicable to the Treatment Project[1]** | **List MMs Applicable to the Treatment Project[1]** | **Identify Impact Significance for Treatment Project** | **Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?** | **Is this Impact Within the Scope of the PEIR?** |
| **Would the project:** | | | | | | | | |
| Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation | LTS | Impact LU-1, pp. 3.12-13–3.12-14 | Yes | AD-3 | N/A | LTS | No | Yes |
| Impact LU-2: Induce Substantial Unplanned Population Growth | LTS | Impact LU-2, pp. 3.12-14–3.12-15 | Yes | N/A | N/A | LTS | No | Yes |

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.11.1 Discussion*

Impact LU-1

Initial treatment and treatment maintenance activities would take place in the cities of Walnut Creek and Lafayette, the Town of Moraga, and unincorporated Contra Costa County. Landowners include EBMUD, the Golden Rain Foundation, Saint Mary's College, PG&E, and other private landowners. SPR AD-3 (Consistency with Local Plans, Policies, and Ordinances) requires that the Project proponent design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans), policies, and ordinances to the extent the Project is subject to them. The Project would be consistent with the Contra Costa County General Plan (Contra Costa County 2005), Lafayette General Plan (City of Lafayette 2023), Walnut Creek General Plan (City of Walnut Creek 2006), and Moraga General Plan (Town of Moraga 2002), which contain goals and policies relating to fire protection and wildland fire prevention. As described in the project description and Section 4.12, "Noise", noise

generating treatment activities would occur during daytime hours and consistent with the local ordinances of the City of Walnut Creek, the City of Lafayette, the Town of Moraga, and unincorporated Contra Costa County. The potential for treatment activities to cause a significant environmental impact due to the conflict with a land use plan, policy, or regulation was evaluated in the PEIR and was found to be less than significant. The potential for vegetation treatment activities to cause a significant environmental impact is within the scope of the PEIR because the treatment types and activities are consistent with those evaluated in the PEIR. SPR AD-3 is applicable to the proposed project, and it requires proposed Project treatments to be consistent with local plans, policies, and ordinances.

The inclusion of land in the proposed treatment area that are outside the CalVTP treatable landscape constitutes a change to the geographic extent considered in the PEIR. However, because the land uses in the Project area are generally the same within and outside the treatable landscape, the land use impact is also the same. Furthermore, no conflict would occur because the project proponent would adhere to SPR AD-3. This determination is consistent with the PEIR and would not constitute a more severe impact than that which is described in the PEIR.

Impact LU-2

The PEIR evaluated the potential for initial treatments and maintenance treatments to result in substantial population growth as a result of increases in demand for employees, which was found to be less than significant. Impacts associated with a short-term increase in the demand for workers during construction of the treatment Project are within the scope of the PEIR because the number of workers required for the proposed Project is consistent with the crew size analyzed in the PEIR for the types of treatments proposed.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape is considered a change to the geographic extent presented in the PEIR. However, because the population and housing characteristics of the Project area are similar both within and outside the treatable landscape, the population and housing impact is also the same, as described above. There are no SPRs applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than that which was evaluated in the PEIR.

New Land Use and Planning, Population, and Housing Impacts

The proposed Project is consistent with the treatment types and activities described in the CalVTP PEIR. The Project proponent has considered the site-specific characteristics of the proposed Project and determined they are consistent with the applicable environmental and regulatory conditions described in the CalVTP PEIR (refer to Sections 3.12.1, “Environmental Setting” and 3.12.2, “Regulatory Setting” in Volume II of the Final PEIR). The Project proponent has also determined that including land in the proposed treatment area that is outside the treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the Project area boundary, the existing conditions

relevant to land use and planning, population, and housing that are present in the areas outside the treatable landscape are very similar to those within the treatable landscape; therefore, the impacts of the proposed Project are also consistent with those disclosed in the PEIR. No changed circumstances are present and the inclusion of lands outside the CalVTP treatable landscape would not result in any new significant impacts. In conclusion, no new impact related to land use and planning, population, and housing would occur.

## 4.12 Noise

**Table 15.** Consistency of Project-Related Noise Impacts with the Scope of the CalVTP PEIR.

| Impact in the PEIR | | | Project-Specific Checklist | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Environmental Impact Covered in the PEIR** | **Identify Impaact Significance in the PEIR** | **Identify Location of Impact Analysis in the PEIR** | **Does the Impact Apply to the Treatment Project?** | **List SPRs Applicable to the Treatment Project[1]** | **List MMs Applicable to the Treatment Project[1]** | **Identify Impact Significance for Treatment Project** | **Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?** | **Is this Impact Within the Scope of the PEIR?** |
| **Would the project:** | | | | | | | | |
| Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation | LTS | Impact NOI-1, pp. 3.13-9–3.13-12; Appendix NOI-1 | Yes | AD-3, NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, NOI-6 | NOI-1 | LTSM | 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 | AD-3, NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, NOI-6 | NA | LTS | No | Yes |

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| Potential for animals used for herbivory treatments to violate local noise ordinances for animals | ☐ | ☒ | ☐ |

### *4.12.1 Discussion*

Impact NOI-1

The Project treatment activities that have the potential for short-term increase in ambient noise level include manual treatments and ground-based mechanical treatments. Prescribed herbivory would potentially occur 24 hours a day, but as noted in the PEIR, prescribed herbivory would not require the use of heavy off-road equipment. Although noise generated by prescribed herbivory would be generally negligible, it is discussed further in this section as the local jurisdictions where the Project is located have ordinances specifically related to animal noise. The manual treatments for this Project include hand-operated power tools, and the mechanical treatments include but are not limited to bucket trucks, tow chippers, track chippers, fire engines, and riding lawn mowers. Manual and mechanical treatments would occur on weekdays during daylight hours only. When work would be conducted within a

jurisdiction with more restrictive noise ordinances (Table 2), manual and mechanical treatments would be conducted within the allowable hours for noise-generating activities. Multiple crews may be working at the same time and using mechanical and manual methods that may generate varying noise levels, temporarily increasing ambient noise in the vicinity. Due to the nature of the proposed Project, private residences and other noise-sensitive land uses are adjacent to the Project area and would temporarily be exposed to noise. The proposed Project would fall within several city/town jurisdictions (cities of Lafayette and Walnut Creek and the town of Moraga) and unincorporated Contra Costa County. The potential for treatment activities to cause substantial short-term increases in exterior ambient noise level was addressed in the PEIR and was found to be less than significant. This impact is within the scope of the PEIR because the types of treatments and associated equipment, and thus the noise generated, is consistent with those analyzed in the PEIR. SPRs applicable to the proposed Project include AD-3, which requires the treatments to be consistent with local plans, policies, and ordinances. As described in the Project Description, all treatments except herbivory would occur primarily on weekdays during daylight hours only.

Contra Costa County and the town of Moraga have animal noise ordinances which prohibit animals from making incessant noise for 30 minutes or more in a 24-hour period or intermittent noise for 60 minutes or more in a 24-hour period. Animals used for herbivory treatment may make noises that could violate these ordinances; however, this is considered unlikely. MM NOI-1 would require posting of signs during herbivory treatment specifying who to contact regarding noise complaints. CCCFPD would take into consideration future use of herbivory treatments in areas that receive noise complaints. With implementation of MM NOI-1, the impact of animal noises would be in line with the local ordinances and be less than significant with mitigation.

MM NOI-1: Avoid Conflicts with Local Noise Ordinances During Prescribed Herbivory

Prior to commencing prescribed herbivory treatments, CCCFPD would post signs including contact information, including a daytime telephone number, of the Project representative, who may be contacted regarding noise complaints. CCCFPD would take into consideration future use of herbivory treatments in areas that receive noise complaints and may adjust the limits of treatment areas to be further from sensitive receptors.

Noise-generating treatments would be within the Contra Costa County construction noise requirements, which state that construction activities should occur during normal work hours and non-noise-sensitive times of day. Table 2 summarizes the noise ordinances of the local jurisdictions. Noise-generating treatments would comply with the local regulations outlined in Table 2, and therefore all work would be within the allowable limits, per SPR AD-3. Additional SPRs applicable to the proposed project include NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6. SPRs NOI-1 through NOI-6 would require that heavy equipment be used only during daytime hours, all equipment be properly maintained, engine shrouds be closed during mechanical equipment operation and idle time be restricted to 5 minutes, all staging

areas be placed away from noise sensitive land types, and any noise sensitive receptors be notified ahead of work to ensure impacts to ambient noise levels would be less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. The northernmost portion of the Project is further from the treatable landscape than other portions of the Project; however, the added acreage would not expand the total annual acreage proposed for treatment under the PEIR of 250,000 acres per year. The existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they would be subject to the same noise ordinances and would have similar noise-sensitive receptors. Therefore, the noise impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact NOI-2

Project treatment activities would require large trucks to haul equipment, crews, and livestock to the Project site. While trucks would pass residential sensitive receptors, it is not anticipated that Project traffic would result in a substantial increase in truck-generated noise along local roads. These large trucks have the potential for a substantial short-term increase in single event noise levels (SENLs), but haul trucks would only be in use during daytime hours, generally Monday through Friday, and in compliance with other more stringent local noise ordinances (see Impact NOI-1). The SENL describes a receiver's cumulative noise exposure from a single impulsive noise event (e.g., an automobile passing by or an aircraft flying overhead), which is defined as an acoustical event of short duration and involves a change in sound pressure above some reference value. The impacts are within the scope of the PEIR because the treatment activities and methods are the same as those analyzed in the PEIR. SPRs applicable to this treatment are AD-3, NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6, described under Impact NOI-1. The potential for a substantial short-term increase in SENL during the Project treatments was evaluated in the PEIR and was found to be less than significant with the implementation of these SPRs.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. As described in Impact NOI-1, the northernmost portion of the Project is further from the treatable landscape than other portions of the Project. For much of the Project area, the existing roadway network and access roads used by the worker vehicles and trucks for hauling would be the same to reach the treatable landscape inside the CalVTP as outside the CalVTP. For portions of the Project area, like the northernmost portion, that are further from CalVTP treatable landscape areas, the types of sensitive receptors located along existing roads and access roads would be the same as those covered in the PEIR. Therefore, the noise impact is also the same as described above and would be less than significant with the application of the same SPRs. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Noise Impacts

The proposed treatment is consistent with the treatment types and activities discussed in the PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (Sections 3.13.1, "Environmental Setting" and 3.13.2, "Regulatory Setting" in Volume II of the Final PEIR).

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental and regulatory conditions pertinent to noise that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed Project is consistent with the types of projects covered in the PEIR. The local jurisdictions where the Project would occur have specific noise ordinances related to noise from animals. The potential for animals used for herbivory treatments to violate local noise ordinances for animals was not specifically addressed in the PEIR but is analyzed in impact NOI-1 above. This would be considered a new impact. An additional mitigation measure, MM NOI-1 has been included for the Project, which would reduce the impact to less than significant. With inclusion of this mitigation measure, no new significant impacts would occur.

## 4.13 Recreation

**Table 16.** Consistency of Project-Related Recreation Impacts with the Scope of the CalVTP PEIR.

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

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact.

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.13.1 Discussion*

Impact REC-1

Initial treatment and treatment maintenance activities would take place on land in and adjacent to the Town of Moraga, City of Lafayette, City of Walnut Creek, and unincorporated Contra Costa County. Some portions of the Project area are designated by the relevant jurisdictions as open space. Access to some treatment areas would rely on fire trails, which are sometimes used as recreational trails. The potential for treatment activities to directly or indirectly disrupt recreational activities within designated recreation areas was evaluated in the PEIR and was found to be less than significant. The potential for vegetation treatment and maintenance activities to cause a significant environmental impact is within the scope of the PEIR because the treatment types and activities are consistent with those evaluated in the PEIR. SPR AD-3 is applicable to the proposed project, and it requires proposed Project treatments to be consistent with local plans, policies, and ordinances relevant to recreation, which include general plans, zoning ordinances, and adopted policies to avoid conflicts with recreational uses. SPR REC-1 is applicable to the proposed Project, and it requires the Project proponent to coordinate with the owner/manager of any recreation area or facility that would be temporarily closed during treatment activity, including posting notifications at least 2 weeks prior to the commencement of the treatment activities. The potential for the proposed treatment Project to impact recreation is within the scope of

the PEIR and would be less than significant because the treatment activities and intensity are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the availability of recreational resources within the Project area is essentially the same as outside the treatable landscape because the areas are near to each other, and the recreational users would be the same. Impacts to recreation would be the same as previously described and would be less than significant. Implementation of SPRs AD-3 and REC-1 would minimize disruption to recreational activities within the Project area. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

New Recreation Impacts

The proposed Project is consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Sections 3.14.1, “Environmental Setting” and 3.14.2, “Regulatory Setting” in Volume II of the Final PEIR).

The inclusion of land in the proposed treatment area that is outside the treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing environmental conditions pertinent to recreation that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as described previously. The proposed Project is consistent with the types of projects covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to recreation would occur.

## 4.14 Transportation

**Table 17.** Consistency of Project-Related Transportation Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.14.1 Discussion*

Impact TRAN-1

Initial treatment and treatment maintenance activities would take place within the Town of Moraga, the cities of Lafayette and Walnut Creek, and unincorporated Contra Costa County. The Project would require limited vehicular traffic along public roadways used to access existing fire roads and trails leading to the specific treatment areas. Project-related traffic would include heavy-vehicle trips to haul equipment and materials and worker commute trips to and from the treatment areas. Initial treatment would likely involve more heavy equipment than subsequent maintenance. Crew sizes may vary but would not be more than 45 workers. All treatments except herbivory would occur primarily on

weekdays during daylight hours only. During prescribed burning, crews would need to conduct some maintenance burning on weekends to manage overall smoke impacts. Noise-generating treatments would comply with the local regulations outlined in Table 2 in the Project Description. Therefore, the increase of vehicle traffic on the surrounding local roads would occur during allowed construction hours.

The number of truck trips and worker vehicle trips to and from the Project area would vary based on the size of the area being treated, the type of treatment being implemented, and the duration of the vegetation treatments. No road closures would be necessary for the implementation of this Project. The potential for a temporary increase in vehicle traffic associated with the proposed project work to conflict with a program, plan, ordinance, or policy addressing roadway facilities, or for prolonged road closures, was examined in the PEIR and found to be less than significant. The proposed temporary increases in traffic related to the Project is within the scope of the PEIR because the treatment duration and limited number of vehicles (e.g., fire engine, water tender, masticator transport, crew vehicles for crew members) associated with the proposed treatments are consistent with those analyzed in the PEIR. The proposed treatments would not all occur concurrently and increases in vehicle trips associated with the treatments would be dispersed on multiple roads, including local roads. SPRs applicable to this treatment are AD-3 and TRAN-1. Implementing SPR AD-3 requires the treatments to be consistent with local plans, policies, and ordinances, and SPR TRAN-1 would require that the project proponent implement a traffic management plan (TMP) and that traffic control measures be placed on affected roadways during Project treatment activities.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing transportation conditions (e.g., roadways, road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they continue from roadways from within the treatable landscape and are under the same jurisdictions and would be subject to the same programs, plans, ordinances, or policies regarding roadway facilities and closures. Therefore, the transportation impact is also the same and would be less than significant with the implementation of the same SPRs. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact TRAN-2

The Project treatment activity that would have the potential to increase transportation hazards during proposed treatment and maintenance activities would be the use of prescribed and pile burning, due to the smoke produced, which could temporarily affect visibility on nearby roadways. The potential for smoke to affect visibility along roadways during implementation of prescribed and pile burning was examined in the PEIR and was found to be less than significant. Vegetation piles for burning would not exceed 20 feet in diameter. Prescribed and pile burning would be conducted in compliance with CAL FIRE and BAAQMD Regulation 5 for open burning and burn day restrictions. CCCFPD would report site conditions and request approval to burn through PFIRS, which serves as an interface between air quality

managers, land management agencies, and individuals that conduct prescribed burning in California. SPRs applicable to this treatment are AD-3 and TRAN-1, described under Impact TRAN-1. The Project proponent would prepare and implement a TMP to avoid and minimize temporary transportation impacts under this SPR. Therefore, the Project treatment activities would not substantially increase hazards due to a design feature or incompatible uses, and impacts would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The Project area includes land that is outside the CalVTP treatable landscape. While this constitutes a change to the geographic area considered in the PEIR, the existing environmental conditions for the land outside the treatable landscape and on the land inside the treatable landscape are essentially the same. Further, the existing transportation conditions (e.g., roadways, road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they continue beyond the treatable landscape. Therefore, the potential to increase hazards is the same for Project areas outside the CalVTP treatable landscape as for areas within the treatable landscape. As a result, the impact to increased hazards is also the same and within the scope of the PEIR. The Project would result in a less-than-significant impact related to increasing road hazards and would not result in a more significant impact than covered in the PEIR.

Impact TRAN-3

The Project treatments could temporarily increase vehicle miles traveled (VMT) above baseline conditions because the Project access locations are in semi-remote locations along fire roads and other small, local roadways, and thus vehicle trips would be required to access the treatment areas. Project-related traffic would include heavy-vehicle trips to haul equipment and materials as well as worker commute trips to and from the treatment areas. The number of truck trips and worker vehicle trips to and from the Project area would vary based on the size of the area being treated, the type of treatment being implemented, and the duration of the vegetation treatments. The most VMT would occur at the beginning and end of the Project to haul equipment in and out of the Project area. Daily VMT would consist of crew transportation to and from the site and, potentially, hauling removed material. This impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP would result in a net increase in VMT. However, as stated in Impact TRAN-3 of the PEIR, individual projects under the CalVTP are likely to generate fewer than 110 trips per day, which is expected to cause a less-than-significant transportation impact for specific later activities, as described in the *Technical Advisory on Evaluating Transportation Impacts* published by the Governor's Office of Planning and Research (Governor's Office of Planning and Research 2018). According to the analysis methodologies presented in the PEIR, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact. As presented in the PEIR, this amount would allow for up to 50 vehicles bringing crews and equipment to and from the Project site and hauling materials away in a single day. Because of the small sizes of the crews needed

for the proposed project (not more than 45 workers), the limited equipment needed, and the limited materials to be hauled in any one day, the total VMT would not exceed 110 trips per day. Initial treatment would likely involve more vehicle trips than subsequent maintenance. Additionally, all vehicle trips would be dispersed across multiple roadways and would likely only utilize particular roadways a few times and for short durations. Hiring local contractors would be encouraged where feasible to reduce the amount of VMT.

Although the PEIR determined that individual vegetation treatments would likely be less than significant, the overall impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP would result in a net increase in VMT attributable to the program as a whole. Because the Project would generate VMT during implementation, it would contribute to the environmental significance conclusion in the PEIR; therefore, this impact is considered significant and unavoidable. No SPRs apply to this impact. As discussed for Impact AQ-1 in Section 4.3, "Air Quality," CCCFPD would implement MM AQ-1 to the extent feasible. MM AQ-1 would reduce the impact by encouraging workers to carpool and/or use public transportation. However, due to the required equipment and number of employees (i.e., the primary trip-generators associated with vegetation treatments) associated with the Project, it would not be feasible to reduce VMT substantially. Therefore, the impact would remain significant and unavoidable.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing transportation conditions (e.g., roadways, road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because they continue beyond the treatable landscape. Therefore, the transportation impact identified in the PEIR for individual projects is also the same, as described above, and would be significant and unavoidable.

New Impacts on Transportation

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Sections 3.15.1, "Environmental Setting" and 3.15.2, "Regulatory Setting" in Volume II of the Final PEIR).

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing environmental conditions pertinent to transportation that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as previously described. The proposed Project is consistent with the types of projects covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impact. Therefore, no new impact related to transportation would occur.

## 4.15 Public Services, Utilities, and Service Systems

**Table 18.** Consistency of Project-Related Public Services, Utilities, and Service Systems Impacts with the Scope of the CalVTP PEIR.

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

[1]NA: not applicable; there are no SPRs and/or MMs identified in the PEIR 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 PEIR? | ☐ Yes | ☒ No | If yes, complete row(s) below and discussion |

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.15.1 Discussion*

Impact UTIL-1

The proposed Project would involve manual treatment, ground-based mechanical treatment including mastication, chipping, and broadcasting, prescribed herbivory, pile burning, prescribed (broadcast) burning, and targeted herbicide use, and biomass disposal including lopping and scattering, hauling off-site, and pile burning. A minimal amount of water would be required for fire suppression during prescribed and pile burning activities and for dust control during mechanical treatments. Depending on the location of the prescribed burning, pile burning, or mechanical treatments, water would be supplied via nearby fire hydrants or be transported via fire trucks. The potential increased demand for water was

examined in the PEIR and was found to be a less than significant impact. This impact is within the scope of the activities and impacts addressed in the PEIR because the amount of water needed for prescribed burning, pile burning, and dust control, and the water source type are consistent with those analyzed in the PEIR. The water would be a minimal demand on local water providers. Implementation of the Project treatments would not result in a physical impact associated with provision of sufficient water supplies, including related infrastructure needs, and this impact would be less than significant. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The proposed Project includes land in the proposed treatment area that is outside the CalVTP treatable landscape, which constitutes a change to the geographic extent presented in the PEIR. Within the boundary of the Project area, the existing conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape because the water service providers would be the same. This impact would also be less than significant and within the scope of the PEIR because the water use and the water providers are essentially the same within and outside the treatable landscape. The treatment activities and intensity of the treatments would be consistent with those analyzed in the PEIR. Therefore, the impact to water providers is also the same and would be less than significant, as previously described. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact UTIL-2

Manual and mechanical treatments would generate biomass as a result of vegetation removal within the Project treatment areas. Biomass generated by mechanical and manual treatments would be processed by chipping and hauling, chipping and broadcasting, or pile burning. The chipped biomass would be broadcast on-site, with chipped materials applied and spread to less than 4 inches in depth to minimize wildfire risk. The remaining biomass that could not be broadcast on-site or pile burned would be hauled off-site to the Central Contra Costa Solid Waste Authority or another appropriate biomass processing facility. The potential to generate solid waste in excess of state standards was examined in the PEIR and was found to be a less-than-significant impact. SPRs AD-3 and UTIL-1 would apply to this potential impact. SPR AD-3 requires the Project proponent to design and implement the Project consistent with local plans and ordinances, and SPR UTIL-1 requires the Project proponent to prepare a Solid Organic Waste Disposition Plan to guide biomass disposal. The potential biomass impact is within the scope of the activities and impacts identified in the PEIR as the conditions for removing biomass are consistent with the analysis in the PEIR.

The PEIR found that while some localities within the state may currently have the requisite infrastructure to process woody biomass or may develop this capacity in the near future, it cannot be guaranteed that all localities across the state would develop the capacities to process excess solid organic waste produced from treatment activities within the timeframes of the proposed activities.

Therefore, because feasible mitigation is not available, and to not risk understating potential future impacts in light of uncertainties about market response, the PEIR classified this impact as potentially significant and unavoidable, notwithstanding the possibility that capacity could increase with the scale of treatments such that it would not be exceeded for most or all individual treatments. However, the Central Contra Costa Solid Waste Authority and other biomass processing facilities are available in Contra Costa County. Therefore, the impact on solid waste disposal is less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe impact than identified in the PEIR.

The inclusion of land that is outside of the treatable landscapes constitutes a change to the geographic extent presented in the PEIR. However, the land included has essentially the same environmental conditions as those assessed within the treatable landscape, and so would result in a similar amount of biomass material for disposal and would use the same local facilities for disposal. The same SPRs would be implemented to ensure consistency with local plans and ordinances and ensure implementation of a Solid Organic Waste Disposition Plan. Therefore, the impact generated from solid waste in excess of state standards outside the treatable landscapes is less than significant. This proposed Project reflects a lesser impact than the statewide program, and the determination is consistent with the PEIR and would not constitute a substantially more severe impact than identified in the PEIR.

Impact UTIL-3

Project treatments as a result of vegetation removal within the Project site would generate biomass, which would be disposed of by pile burning, chipping and broadcasting, or chipping and hauling. The potential to conflict with federal, state, and local waste management requirements was examined in the PEIR and was found to be a less-than-significant impact. The biomass that remains after pile burning and broadcasting would be transported to the Central Contra Costa Solid Waste Authority or another biomass processing facility. The Project would be in compliance with federal, state, and local goals related to solid waste, as required by SPR AD-3. The Project would apply SPR UTIL-1, which requires implementation of a Solid Organic Waste Disposition Plan. The Project is within the scope of activities and impacts identified in the PEIR.

The inclusion of land outside the treatable landscape constitutes a change to the geographic extent of the PEIR. However, the environmental conditions outside the treatable landscape are essentially the same as those within the treatable landscape because they are near or adjacent to the treatable landscape, would generate a similar amount of solid waste, and would use the same waste disposal facilities. Therefore, the impact related to compliance with federal, state, and local goals and regulations regarding solid waste is less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Impacts on Public Services, Utilities, and Service Systems

The proposed treatments are consistent with the treatment types and activities considered in the PEIR. The site-specific characteristics of the proposed treatments have been considered and found to be consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Sections 3.16.1, “Environmental Setting” and 3.16.2, “Regulatory Setting” in Volume II of the Final PEIR). The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape, as described above. Therefore, the impacts of the Project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts not addressed in the PEIR. Therefore, no new impact related to public service, utilities, and service systems would occur that is not covered in the PEIR.

## 4.16 Wildfire

**Table 19.** Consistency of Project-Related Wildfire Impacts with the Scope of the CalVTP PEIR.

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

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

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

| | Potentially Significant | Less Than Significant with Mitigation Incorporated | Less than Significant |
|---|---|---|---|
| | ☐ | ☐ | ☐ |

### *4.16.1 Discussion*

Impact WIL-1

The Project would create and maintain a 299-acre reduced fuel zone around the Rossmoor Community in Contra Costa County. The Project would result in the collective protection of over 30,000 residents by creating a shaded fuel break approximately 19 miles in length within the cities of Lafayette and Walnut Creek, and the town of Moraga. The Project would reduce excess and ladder fuels and would provide strategic locations to effectively fight wildfires.

Initial and maintenance treatments would include pile burning, prescribed (broadcast) burning, and mechanical treatments, which could result in temporary risks associated with uncontrolled wildfire, accidental wildfire ignition, or risk of a prescribed fire escaping its control lines. The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR and found to be

less than significant. Increased wildfire risk associated with prescribed pile burning, prescribed burning, and use of heavy equipment in vegetated areas is within the scope of the PEIR. SPRs HAZ-2, HAZ-3, HAZ-4, and AD-3 would be implemented to reduce the risk of exposure to wildfire by requiring spark arrestors on mechanical hand tools, requiring crews to carry one fire extinguisher per chainsaw, prohibiting smoking in vegetated areas, and consistency with local plans, policies, and ordinances. Based on the implementation of the SPRs, the potential to substantially exacerbate fire risk and expose people to uncontrolled spread of wildfire would be less than significant.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the wildfire risk of the Project area is essentially the same within and outside the treatable landscape; therefore, the wildfire impact is also the same, as described above. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

Impact WIL-2

Initial and maintenance treatments would include prescribed burning (pile and broadcast), mechanical treatment using motorized equipment, and prescribed herbivory. The potential for post-fire flooding and erosion, including landslides, was examined in the PEIR and found to be less than significant. Mechanical treatment activities would occur predominantly on slopes below 40 percent grade and along ridges, and may occur on slopes greater than 40 percent grade with equipment that can reach target vegetation from existing road infrastructure. Mechanical treatments would not be applied on slopes above 50 percent.

Implementation of SPRs AD-3, AQ-3 and GEO-3 through GEO-5 would reduce the risk of erosion and landslides post-prescribed burn and/or post-fire, in the event that a wildfire occurred as a result of the proposed treatments or an unrelated occurrence. Implementation of AD-3 would ensure consistency with local plans, policies, and related ordinances. Implementation of SPR AQ-3 would minimize soil burn severity during prescribed burns, which would help to retain vegetation to stabilize the soil. SPR GEO-3 requires stabilization of disturbed soil areas during treatment activities, SPR GEO-4 requires inspection of the treatment area for proper erosion control measures prior to the rainy season and immediately following the first large rainfall event, and SPR GEO-5 requires stormwater to be drained via water breaks to decrease the potential for channelized erosion within linear treatment areas. As described in Impact WIL-1, this Project intends to create and maintain a reduced fuel zone, which may lead to smaller burn scars, or less area susceptible to post-fire flooding or erosion.

The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the post-fire landslide risk of the Project area is essentially the same within and outside the treatable landscape due to similar slopes, soils, hydrological and geological conditions. Therefore,

the wildfire impact outside the treatable landscape is also the same and less than significant, as described above, with implementation of the same SPRs. The impact outside the treatable landscapes would be consistent with the lands analyzed in the PEIR.

New Impacts to Wildfire

The Project proponent has considered the site-specific characteristics of the proposed treatment Project and determined they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR. The Project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the Project area, the existing environmental and regulatory conditions pertinent to wildfire that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment Project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Therefore, no new impact related to wildfire risk would occur.

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# Attachment A

## Mitigation and Monitoring Reporting Program

# A.1 Lafayette/Walnut Creek Shaded Fuel Break Project: Mitigation Monitoring and Reporting Program

## Standard Project Requirements

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
|---|---|---|---|---|
| **Administrative Standard Project Requirements** | | | | |
| **SPR AD-1 Project Proponent Coordination:** For treatments coordinated with CAL FIRE, CAL FIRE would meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources on-site; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the Burn Plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |
| **SPR AD-2 Delineate Protected Resources:** The project proponent would 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 would be performed by a qualified person, as defined for the specific resource (e.g., qualified RPF or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to treatment | CCCFPD | CCCFPD |
| **SPR AD-3 Consistency with Local Plans, Policies, and Ordinances**: The project proponent would design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during treatment | CCCFPD | CCCFPD |
| **SPR AD-4 Public Notifications for Prescribed Burning:** At least 3 days (to be determined by the Project Owner) prior to the commencement of prescribed burning operations, the project proponent would: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior<br>At least 3 days prior to prescribed | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
|---|---|---|---|---|
| information would be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; and 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. | | burn treatment activities | | |
| **SPR AD-5 Maintain Site Cleanliness:** If trash receptacles are used on-site, the project proponent would use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the Project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to, during, and following treatment | CCCFPD | CCCFPD |
| **SPR AD-6 Public Notifications for Treatment Projects**. One to three days prior to the commencement of a treatment activity, the project proponent would post signs in a conspicuous location near the treatment area describing the activity and timing and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4. | Initial Treatment: Y<br>Treatment Maintenance: Y | 1–3 days prior to treatment activities | CCCFPD | CCCFPD |
| **SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects**. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent would provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE would make this information available to the public via an online database or other mechanism. Information on proposed Projects (PSA in progress):<br>• Geographic Information Systems (GIS) data that include project location (as a point);<br>• Project size (typically acres); | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior, during, post | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
|---|---|---|---|---|
| • Treatment types and activities; and<br>• Contact information for a representative of the project proponent.<br>The project proponent would provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent would provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than 2 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).<br>Information on approved projects (PSA complete):<br>• A completed PSA Environmental Checklist;<br>• A completed MMRP (using Attachment A to the Environmental Checklist);<br>• 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).<br>Information on completed projects:<br>• 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)<br>• A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes:<br>○ Size of treated area (typically acres);<br>○ Treatment types and activities;<br>○ Dates of work;<br>○ A list of the SPRs and mitigation measures that were implemented; and<br>○ 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 MMs BIO-1a and BIO-2b).<br>This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | | | | |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
|---|---|---|---|---|
| **SPR AD-8 Request Access for Post-Treatment Assessment.** For CAL FIRE projects, during contract development, CAL FIRE would include access to the treated area over a prescribed period (usually up to 3 years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period would be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Annually | CCCFPD | CCCFPD |
| **SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required**. When planning a treatment project within the Coastal Zone, the project proponent would contact the local Coastal Commission district office, or applicable local government to determine if the Project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone would 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 would be designed to meet the following conditions:<br>i. The treatment project would 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 would occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and<br>ii. The treatment project would 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 would occur within the jurisdiction of a local coastal government with a certified LCP.<br>This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |
| **Aesthetic and Visual Resource Standard Project Requirements** | | | | |
| **SPR AES-1 Vegetation Thinning and Edge Feathering:** The project proponent would 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
|---|---|---|---|---|
| patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, would achieve a natural transitional appearance. The contrast of a distinct clearing edge would be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance. | | | | |
| **SPR AES-2 Avoid Staging within Viewsheds:** The project proponent would 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 would 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. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR AES-3 Provide Vegetation Screening**: The project proponent would 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. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior, during | CCCFPD | CCCFPD |
| **Air Quality Standard Project Requirements** | | | | |
| **SPR AQ-1 Comply with Air Quality Regulations:** The project proponent would comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR AQ-2 Submit Smoke Management Plan:** The project proponent would 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 would not be required for burns less than 10 acres that also would not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning would only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior | CCCFPD | CCCFPD |
| **SPR AQ-3 Create Burn Plan:** The project proponent would create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. The Burn Plan would include a fire behavior model output of First Order | Initial Treatment: Y | Prior | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| 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 would minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The Burn Plan would 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.<br>*Project-Specific Measures*<br>*No fire ignition (nor use of associated accelerants) would occur within 50 feet of listed plants, riparian habitat or aquatic features, or any identified sensitive species or habitat.*<br>*In habitat suitable for Alameda whipsnake, suitable winter retreats (e.g., within native scrub habitat, rock outcrops within approximately 50 feet of scrub habitat), as determined by a qualified biologist, prescribed burning would not occur between approximately November 1 and March 31 (as determined by a qualified biologist based on temperature and weather conditions) in order to avoid potential disturbance of hibernating Alameda whipsnake.*<br>*Prescribed burning and pile burning would be restricted to when temperatures are conducive to Alameda whipsnake movement, which is typically when soil surface temperatures reach 66 °F (19 °C) (Hammerson 1979).* | Treatment Maintenance: Y | | | |
| **SPR AQ-4 Minimize Dust**: To minimize dust during treatment activities, the project proponent would implement the following measures:<br>• 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.<br>• If road use creates excessive dust, the project proponent would 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 would be environmentally benign (i.e., non-toxic to plants and would not negatively impact water quality) and its use would not be prohibited by CARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent would not over-water exposed areas such that | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD/ Contractor | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| the water results in runoff. The type of dust suppression method would be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations.<br>• 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 would 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.<br>• 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.<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance. | | | | |
| **SPR AQ-5 Avoid Naturally Occurring Asbestos:** The project proponent would avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district would be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |
| **SPR AQ-6: Prescribed Burn Safety Procedures**. Prescribed burns planned and managed by non-CAL FIRE crews would follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP), which would 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 would also assign responsibilities for coordination with the appropriate air district, such as conducting on-site briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During prescribed burn treatment activities | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements** | | | | |
| **SPR CUL-1 Conduct Record Search:** An archaeological and historical resource record search would be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: N | Prior | CCCFPD | CCCFPD |
| **SPR CUL-2 Contact Geographically Affiliated Native American Tribes:** The project proponent would obtain the latest NAHC-provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent would notify the California Native American Tribes in the counties where the treatment activity is located. The notification would contain the following:<br>• A written description of the treatment location and boundaries.<br>• Brief narrative of the treatment objectives.<br>• A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.<br>• A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.<br>• A request for information regarding potential impacts to cultural resources from the proposed treatment.<br>• A detailed description of the depth of excavation, if ground disturbance is expected.<br>In addition, the project proponent would contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: N | Prior | CCCFPD | CCCFPD |
| **SPR-CUL-3 Pre-field Research:** The project proponent would 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 would review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the | Initial Treatment: Y<br>Treatment Maintenance: N | Prior | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | | | | |
| **SPR CUL-4 Archaeological Surveys:** The project proponent would 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 would be completed for every cultural resource survey completed. The specific requirements would comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: N | Prior | CCCFPD | CCCFPD |
| **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.<br>*Project-Specific Measures*<br>*Prior to any ground disturbing activities within the area of Tice Creek and Rossmoor Parkway, a qualified archaeologist (see CalVTP PEIR Page 3.15-12) shall be retained to cordon or fence the known boundaries of CA-CCO-309 to avoid any potential disturbance of the site. If requested by the tribes, a consulting Tribal representative shall also be contacted to provide guidance regarding the avoidance measures. If the proposed activities cannot avoid the location to achieve the objective of the project, the archaeologist shall monitor all ground disturbing activity within the boundaries of the site. Ground disturbing activity includes any mechanical or other alteration of the surface. A Tribal representative may also participate in the* | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior, during | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *monitoring activities. If any cultural materials are identified, all work within the area of the find shall halt until the archaeologist and Tribal representative can assess the significance of the find. If the find is determined to not contribute to the significance of the site, the activities can resume within the boundaries of the site. If they are determined to contain additional, substantial data related to the significance of the site, the stipulations outlined in MM CUL-2 shall be followed regarding a data recovery plan.* | | | | |
| **SPR CUL-6 Treatment of Tribal Cultural Resources:** The project proponent, in consultation with the culturally affiliated tribe(s), would 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 would not occur. The project proponent would provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent would defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior, during | CCCFPD | CCCFPD |
| **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 would avoid these resources. Within a buffer of 100 feet of the built historical resource, there would be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources would 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 would similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior, during | CCCFPD | CCCFPD |
| **SPR CUL-8 Cultural Resource Training:** The project proponent would train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or Tribal cultural resources. Workers would be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **Biological Resources Standard Project Requirements** | | | | |
| **SPR BIO-1:** Review and Survey Project-Specific Biological Resources. The project proponent would 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 would include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment would occur. It would also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, the CNDDB, the CNPS Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys would 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 would 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 assess the suitability of habitat for special-status plant and animal species. The surveyor would also record any incidental wildlife observations. For each treatment project, habitat assessments would 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 would verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, would determine which one of the following best characterizes the treatment: | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to treatment and treatment maintenance<br>Initial data review and reconnaissance-level survey are complete (Attachment B) | CCCFPD | CCCFPD |
| 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 would be implemented prior to initiating treatment and would remain in effect throughout the treatment:<br>a. By physically avoiding the suitable habitat, or | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and treatment maintenance | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| 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).<br><br>Physical avoidance would 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.<br><br>**2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided.** Further review and surveys would 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, National Oceanic and Atmospheric Administration (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 would be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures would 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).<br><br>This SPR applies to all treatment activities and treatment types, including treatment maintenance.<br><br>*Project-Specific Measures*<br><br>*A qualified RPF or biologist would conduct a pre-treatment survey to identify, map, and flag any sensitive plants or vegetative communities for avoidance or follow-up surveys if needed. The surveys would be conducted when weather conditions and timeframes are suitable for the detection of sensitive resources. No work would occur in the work area until the area has been adequately surveyed and assessed for sensitive resources.* | | | | |
| **SPR BIO-2: Require Biological Resource Training for Workers.** The project proponent would require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training would describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental | Initial Treatment: Y<br><br>Treatment Maintenance: Y | Prior to treatment and | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| laws and regulations. The training would 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 would 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 would immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by CESA or 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. | | treatment maintenance | | |
| **Sensitive Natural Communities and Other Sensitive Habitats** | | | | |
| **SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.** If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent would:<br>• Require a qualified RPF or biologist to perform a protocol-level survey following the most current CDFW protocols (CDFW 2023a) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities would 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; CNPS 2023), or referring to relevant reports (e.g., reports found on the Vegetation Classification and Mapping Program website).<br>• Map and digitally record, using a Global Positioning System unit, the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance.<br>*Project-Specific Measures*<br>*If any rare plant populations are found, location, quantity and description would be reported to the CNDDB. Any in-field methods of identification that would require handling would follow proper permitting and protocols.* | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to treatment and treatment maintenance | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function**. Project proponents, in consultation with a qualified RPF or biologist, would design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:<br>• 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 would 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.<br>• Treatments would 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.<br>• Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) would be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy would be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter would 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 would be retained. A scientifically based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal would 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.<br>• Removed trees would 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 NMFS et al. 2018]). | Initial Treatment: N<br>Treatment Maintenance: N<br>Treatment will avoid riparian habitat by a minimum 50-foot buffer | N/A | N/A | N/A |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • Vegetation removal that could reduce stream shading and increase stream temperatures would be avoided.<br>• Ground disturbance within riparian habitats would be limited to the minimum necessary to implement effective treatments. This would 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.<br>• Only hand application of herbicides approved for use in aquatic environments would be allowed and only during low-flow periods or when seasonal streams are dry.<br>• The project proponent would notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification would 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.<br>• In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version; CAL FIRE 2019), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards would only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance. | | | | |
| **SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.** The project proponent would design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot, Wilson, and Boumans 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).<br><br>During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist would identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area.<br><br>For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or biologist would:<br><br>• Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which would include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent would demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.<br><br>• The treatment design would maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover would be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained would be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes | | treatment maintenance | | |

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| would be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.<br><br>These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.<br><br>Additional measures would be applied to ecological restoration treatment types:<br><br>• For ecological restoration treatment types, complete removal of the mature shrub layer would not occur in native chaparral and coastal sage scrub vegetation types.<br><br>• Ecological restoration treatments would not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved.<br><br>• A minimum of 35 percent relative cover of existing shrubs and associated native vegetation would be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy would be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density would be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology.<br><br>• If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes would be retained to maintain and improve heterogeneity.<br><br>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.<br><br>A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, would be responsible for defining type conversion in the context of the project and making the finding that type conversion would | | | | |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| not occur, as required by SB 1260. The project proponent would determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR. | | | | |
| **SPR BIO-6: Prevent Spread of Plant Pathogens**. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent would implement the following best management practices (BMPs) to prevent the spread of *Phytophthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):<br>• 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;<br>• Include training on *Phytophthora* diseases and other plant pathogens in the worker awareness training;<br>• 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;<br>• Minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;<br>• 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<br>• Follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration-sites or with rare plants and sensitive habitat (UC Cooperative Extension et al. 2016).<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance.<br>*Project-Specific Measures*<br>*To contain the spread of* Phytophthora ramorum*, crews would minimize the movement of soil and leaf litter under and around infected trees. Boots, treads, and equipment such as saws, shovels, hoes, and other tools would be scrubbed free of soil and debris that come from infected sites. All reasonable methods to sanitize shoes and equipment would be used in areas with susceptible species, both before and after work in those* | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and treatment maintenance | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *areas. These methods would include disinfecting material with 10% bleach, Lysol, or 70% isopropyl alcohol after the surface has been scrubbed free of debris with bristle brushes. Any material suspected of being infected must stay in the area, as close to the origin point as possible. Generally, removal of* P. ramorum*-infected or killed oak trees is only necessary if the tree is considered hazardous in a park setting. When infected oaks are cut down and left on-site, the branches would be chipped and cut and split, if possible, to reduce fire hazard and facilitate decomposition. If chipping is not possible, material would be lopped and scattered downslope and away from host species to reduce fire hazard and further spread. When debris may not be left, infested material would be disposed of at an approved and permitted dump facility.* | | | | |
| **Special-Status Plants** | | | | |
| **SPR BIO-7: Survey for Special-Status Plants.** If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent would 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 would follow the surveying and evaluation methods for special-status plants and sensitive natural communities (CDFW 2018).<br><br>Surveys to determine the presence or absence of special-status plant species would 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 would be assumed to be special-status.<br><br>If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species would be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys would not be required under the following circumstances:<br><br>• 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.<br><br>• 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 | Initial Treatment: Y<br><br>Treatment Maintenance: Y | Prior to and during treatment and treatment maintenance | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment would 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.<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance. | | | | |
| **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 would, in consultation with the Coastal Commission or a local government with a certified LCP (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts:<br>• The treatment would 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.<br>• Treatment actions would 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.<br>• A qualified biologist or RPF familiar with the ecology of the treatment area would monitor all treatment activities in ESHAs.<br>• Appropriate no-disturbance buffers would 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.<br>This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *Project-Specific Measures*<br>*To avoid impacts to sensitive natural communities, focused botanical surveys would be performed (MM BIO-1a and MM BIO-1b). If these communities are identified, they would be recorded using a GPS and mapped. No Project-related ground disturbance would occur within 50 feet of these sensitive natural communities (MM BIO-3a).* | | | | |
| **Invasive Plants and Wildlife** | | | | |
| **SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.** The project proponent would take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):<br>• 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;<br>• 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 would be specified if the equipment has been exposed to any pathogen that could affect native species;<br>• 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 would deny entry to the work areas;<br>• Stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;<br>• 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 would be selected based on the invasive species present and may include herbicide | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and treatment maintenance | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| application, manual or mechanical treatments, prescribed burning, and/or herbivory, and would 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 would be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;<br>• Treat invasive plant biomass on-site 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<br>• Implement Fire and Fuel Management BMPs outlined in Cal-IPC manual (Cal-IPC 2012 or current version).<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance.<br>*Project-Specific Measures*<br>*Control of invasive plants and noxious weeds would follow the recommendations given by the Cal-IPC and the most updated scientific methods. When working in areas with broom, starthistle, or other invasive plants, crews would ensure equipment is cleaned of all soil, mud, and debris before departing the site. Whenever possible, crews and equipment would remain on paved, rocked, and well-traveled trails and would avoid cross-country travel. Mud, soil, and organic debris must be removed from equipment, treads, and boots before moving between work sites, with removed soil being left at its original location. Crews can remove soil and vegetative debris by brushing and blowing, followed by water or sanitizing solution if necessary. If water is used, crews would ensure that no erosion occurs, and no waterways are contaminated.* | | | | |
| **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 would 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and treatment maintenance | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| affected by a treatment activity. The survey area would be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.<br>The qualified RPF or biologist would 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 would 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. | | | | |
| **SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory).** If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design would be used. The project proponent would require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design would meet the following standards:<br>• Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale or snag a leaping animal; and, if feasible, keeping electric netting-type fencing electrified at all times or laid down while not in use.<br>• Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers would not be permitted.<br>• Allow wildlife to jump over easily without injury by installing fencing that can flex as animals pass over it and installing the top wire low enough (no more than approximately 40 inches high on flat ground) to allow adult ungulates to jump over it. The determination of appropriate fence height would consider slope, as steep slopes are more difficult for wildlife to pass.<br>• Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers.<br>This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and treatment maintenance | CCCFPD | CCCFPD |
| **SPR BIO-12. Protect Common Nesting Birds, Including Raptors.** The project proponent would 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment and | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| not otherwise treated as special-status in the CalVTP PEIR. The active nesting season would be defined by the qualified RPF or biologist.<br><br>If active nesting season avoidance is not feasible, a qualified RPF or biologist would 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 would encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area would 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 would 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 would occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically 1 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 would 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).<br><br>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 would implement a feasible strategy to avoid disturbance of active nests, which may include but is not limited to one or more of the following:<br><br>• **Establish Buffer**. The project proponent would establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities would be implemented outside of the buffer, the location of which would be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location would 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 | | treatment maintenance | | |

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| would be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.<br>• **Modify Treatment**. The project proponent would 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 would be determined by the project proponent in coordination with the qualified RPF or biologist.<br>• **Defer Treatment**. The project proponent would 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 would not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.<br>Feasible actions would be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies would be determined by the project proponent based on whether implementation of this SPR would 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 would 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 would be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).<br>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:<br>• **Monitor Active Raptor Nest During Treatment**. A qualified RPF, biologist, or biological technician would 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) would be implemented or a pause in the treatment activity would occur until the disturbance behavior ceases. | | | | |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • **Retention of Raptor Nest Trees**. Trees with visible raptor nests, whether occupied or not, would be retained.<br>This SPR applies to all treatment activities and treatment types, including treatment maintenance. | | | | |
| **Geology, Soils, and Mineral Resource Standard Project Requirements** | | | | |
| **SPR GEO-1 Suspend Disturbance during Heavy Precipitation:** The project proponent would 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.<br>*Project-Specific Measures*<br>*To prevent herbicides from being mobilized and soil from being compacted, which increases runoff and erosion risk, the project proponent would suspend mechanical 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 activities. The project proponent would 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.* | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **SPR GEO-2 Limit High Ground Pressure Vehicles:** The project proponent would 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 would be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR GEO-3 Stabilize Disturbed Soil Areas:** The project proponent would 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 would 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 would be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the Project area treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR GEO-4 Erosion Monitoring:** The project proponent would 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 would be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent would 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 would result in substantial sediment discharge would be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During, after | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **SPR GEO-5 Drain Stormwater via Water Breaks:** The project proponent would 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 (CAL FIRE 2019). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls would be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR GEO-6 Minimize Burn Pile Size:** The project proponent would 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 would not occupy more than 15 percent of the total treatment area (Busse, Hubbert, and Moghaddas 2014). The project proponent would not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR GEO-7 Minimize Erosion:** To minimize erosion, the project proponent would:<br>(1) Prohibit use of heavy equipment where any of the following conditions are present:<br>(i) Slopes steeper than 65 percent.<br>(ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.<br>(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.<br>(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 would be limited to:<br>(i) Existing tractor roads that do not require reconstruction, or<br>(ii) New tractor roads flagged by the project proponent prior to the treatment activity.<br>(3) Prescribed herbivory treatments would not be used in areas with over 50 percent slope. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | | | | |
| **SPR GEO-8 Steep Slopes:** The project proponent would require a 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 would be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) would determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that would be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |
| **Greenhouse Gas Emissions Standard Project Requirements** | | | | |
| **SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process:** The project proponent of treatment projects subject to the AB 1504 process would provide all necessary data about the treatment that is needed by the US Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |
| **Hazardous Material and Public Health and Safety Standard Project Requirements** | | | | |
| **SPR HAZ-1 Maintain All Equipment:** The project proponent would maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records would be available for verification. Prior to the start of treatment activities, the project proponent would inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking would be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior, during, after | CCCFPD | CCCFPD |
| **SPR HAZ-2 Require Spark Arrestors**: The project proponent would 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. | Initial Treatment: Y | During | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| | Treatment Maintenance: Y | | | |
| **SPR HAZ-3 Require Fire Extinguishers:** The project proponent would require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR HAZ-4 Prohibit Smoking in Vegetated Areas:** The project proponent would require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR HAZ-5 Spill Prevention and Response Plan:** The project proponent or licensed Pest Control Advisor would prepare a Spill Prevention and Response Plan prior to beginning any herbicide treatment activities to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The Spill Prevention and Response Plan would include (but not be limited to):<br>• A map that delineates staging areas, and storage, loading, and mixing areas for herbicides;<br>• A list of items required in an on-site spill kit to be maintained throughout the life of the activity;<br>• Procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.<br>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.<br>*Project-Specific Measures*<br>*Herbicide application would not occur within protective buffers for special-status plants and riparian habitat to prevent drift and non-target application.* | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior | CCCFPD | CCCFPD |
| **SPR HAZ-6 Comply with Herbicide Application Regulations:** The project proponent would coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and | Initial Treatment: Y | Prior, during | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| permits would be obtained prior to herbicide application. The project proponent would prepare all herbicide applications to do the following:<br>• Be implemented consistent with recommendations prepared annually by a licensed Pest Control Advisor.<br>• 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, the Department of Pesticide Regulation (DPR), and applicable local jurisdictions.<br>• 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.<br>• Be applied by an applicator appropriately licensed by the State.<br>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance. | Treatment Maintenance: Y | | | |
| **SPR HAZ-7 Triple Rinse Herbicide Containers:** The project proponent would 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 would 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 would be followed. Disposal of non-recyclable containers would be at legal dumpsites. Equipment would not be cleaned, and personnel would 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 would follow label requirements and waste disposal regulations.<br>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR HAZ-8 Minimize Herbicide Drift to Public Areas:** The project proponent would employ the following herbicide application parameters during herbicide application to minimize drift into public areas:<br>• Application would cease when weather parameters exceed label specifications or when sustained | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| winds at the site of application exceeds 7 miles per hour (whichever is more conservative);<br>• Spray nozzles would be configured to produce the largest appropriate droplet size to minimize drift;<br>• Low nozzle pressures (30-70 pounds per square inch) would be utilized to minimize drift; and<br>• Spray nozzles would be kept within 24 inches of vegetation during spraying.<br>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance. | | | | |
| **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 would post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs would 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 would be posted prior to the start of treatment and notification would remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |
| **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 would apply. If applicable, this includes compliance with the conditions of general WDRs and WDR waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDRs and Waivers of WDRs 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| 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.<br>*Project-Specific Measures*<br>*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 would use the State Water Board's Vegetation Treatment General Order, which provides a mechanism for Water Code compliance for projects that prepare a PSA/Addendum. The project would 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 would 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. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |
| **SPR HYD-3 Water Quality Protections for Prescribed Herbivory:** The project proponent would include the following water quality protections for all prescribed herbivory treatments:<br>• Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas would be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet would be maintained between sensitive and actively grazed areas.<br>• Water would be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of environmentally sensitive areas.<br>• Treatment prescriptions would be designed to protect soil stability. Grazing animals would be herded out of an area if accelerated soil erosion is observed.<br>This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

<table>
<tr><th>STANDARD PROJECT REQUIREMENTS</th><th>APPLICABLE? (Y/N)</th><th>TIMING</th><th>IMPLEMENTING ENTITY</th><th>VERIFYING/ MONITORING ENTITY</th></tr>
<tr><td>
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent would establish 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 (CAL FIRE 2019). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.
<br><br>Procedures for Determining WLPZ Widths
<table>
<tr><th>Water Class</th><th>Class I</th><th>Class II</th><th>Class III</th><th>Class IV</th></tr>
<tr><td>Water Class Characteristics or Key Indicator Beneficial Use</td><td>1) Domestic supplies, including springs, on-site and/or within 100 feet downstream of the operations area and/or<br>2) Fish always or seasonally present on-site, includes habitat to sustain fish migration and spawning.</td><td>1) Fish always or seasonally present offsite within 1,000 feet downstream and/or<br>2) Aquatic habitat for non-fish aquatic species.<br>3) Excludes Class III waters that are tributary to Class I waters.</td><td>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.</td><td>Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.</td></tr>
<tr><td colspan="5">WLPZ Width (feet) – Distance from top of bank to the edge of WLPZ</td></tr>
<tr><td>< 30 % Slope</td><td>75</td><td>50</td><td rowspan="3">Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.</td><td></td></tr>
<tr><td>30-50 % Slope</td><td>100</td><td>75</td><td></td></tr>
<tr><td>> 50 % Slope</td><td>150</td><td>100</td><td></td></tr>
</table>
Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version).
<br><br>The following WLPZ protections would be applied for all treatments:
<ul>
<li>Treatment activities with WLPZs would 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 would provide the project proponent with a site- and/or treatment activity-</li>
</ul>
</td><td>Initial Treatment: Y<br>Treatment Maintenance: Y</td><td>Prior and during</td><td>CCCFPD</td><td>CCCFPD</td></tr>
</table>

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| specific explanation for the percent surface cover reduction, which would 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 would be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).<br>• 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.<br>• Equipment used in vegetation removal operations would 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.<br>• WLPZs would be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits would be removed immediately.<br>• Burn piles would be located outside of WLPZs.<br>• No fire ignition (nor use of associated accelerants) would occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.<br>• 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 would prevent significant movement of soil into water bodies and may include but are not limited to mulching, riprap, grass seeding, or chemical soil stabilizers.<br>• 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.<br>• 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 | | | | |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.<br>• Equipment limitation zones (ELZs) would 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 would describe the limitations of heavy equipment within the ELZ and, where appropriate, would include additional measures to protect the beneficial uses of water.<br>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 would implement the following measures when applying herbicides:<br>• 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.<br>• 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 would be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.<br>• No terrestrial or aquatic herbicides would 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 would be determined by the project proponent and may be based on whether doing so would preclude achieving CalVTP program objectives, including but not limited to protection of vulnerable communities. The reasons for infeasibility would be documented in the PSA.<br>• No herbicides would be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools.<br>• 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. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • Application would 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).<br>• No herbicide would be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.<br>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 would 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 would coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |
| **Noise Standard Project Requirements** | | | | |
| **SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:** The project proponent would require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) would 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 would 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 would 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 would adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR NOI-2 Equipment Maintenance:** The project proponent would require that all powered treatment equipment and power tools would be used and maintained according to manufacturer specifications. All | Initial Treatment: Y | Prior and during | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| diesel- and gasoline-powered treatment equipment would 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. | Treatment Maintenance: Y | | | |
| **SPR NOI-3 Engine Shroud Closure:** The project proponent would require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses:** The project proponent would locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |
| **SPR NOI-5 Restrict Equipment Idle Time:** The project proponent would require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks would be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | During | CCCFPD | CCCFPD |
| **SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:** For treatment activities utilizing heavy equipment, the project proponent would notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification would 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) would also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior | CCCFPD | CCCFPD |
| **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 would coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is | Initial Treatment: Y<br>Treatment | Prior | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| required, the project proponent would 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 would be provided<br>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. | Maintenance: Y | | | |
| **Transportation Standard Project Requirements** | | | | |
| **SPR TRAN-1 Implement Traffic Control during Treatments:** Prior to initiating vegetation treatment activities the project proponent would work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is 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 would be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP would 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 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.<br>If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP would 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.<br>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 would be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations would be identified and<br>addressed within the TMP, which would include measures to monitor smoke dispersion onto public | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

| STANDARD PROJECT REQUIREMENTS | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| roadways, and traffic control operations that would 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. | | | | |
| **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 would prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan would include the amount (e.g., tons) of solid organic waste to be managed on-site (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 would 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. | Initial Treatment: Y<br>Treatment Maintenance: N | Prior | CCCFPD | CCCFPD |

## Mitigation Measures

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **Aesthetics and Visual Resources** | | | | |
| **MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks**<br>The project proponent would conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation.<br>If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent would, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent would implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent would thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to help screen public views and minimize the contrast between the fuel break and surrounding vegetation. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |
| **Air Quality** | | | | |
| **MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques.**<br>Where feasible, project proponents would 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 would not feasible. The project proponent would document the emission reduction techniques that would be applied and would explain the reasons other techniques that could reduce emissions are infeasible. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| Techniques for reducing emissions may include but are not limited to the following:<br>• Diesel-powered off-road equipment used in construction would 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 would 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) would be available upon request at the time of mobilization of each unit of equipment.<br>• Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria:<br>○ Meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer;<br>○ 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;<br>○ Contain no fatty acids or functionalized fatty acid esters; and<br>○ 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.<br>• Electric- and gasoline-powered equipment would be substituted for diesel-powered equipment.<br>• Workers would be encouraged to carpool to work sites, and/or use public transportation for their commutes.<br>• Off-road equipment, diesel trucks, and generators would be equipped with Best Available Control Technology for emission reductions of NOX and PM. | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *Project-Specific Measures*<br>*CCCFPD would document the extent that it and/or its contractors are able to implement MM AQ-1 by documenting each unit's certified engine tier specification and applicable CARB fleet regulation compliance certificates prior to mobilization. This information would be compiled in an annual monitoring compliance report for the project. Renewable diesel would be used by the agency and/or its contractors to the extent required by state regulations.* | | | | |
| **Archaeological, Historical, and Tribal Cultural Resources** | | | | |
| **MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources**<br>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 would be halted and a qualified archaeologist would assess the significance of the find. The qualified archaeologist would work with the project proponent to develop a primary records report that would comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan would be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or Tribal cultural resource), the archaeologist would 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 would be recorded standard DPR Primary Record forms (Form DPR 523) would be submitted to the appropriate regional information center. | Initial Treatment: Y<br>Treatment Maintenance: Y | During and after | CCCFPD | CCCFPD |
| **Biological Resources** | | | | |
| **MM BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA**<br>If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent would 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers would 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 would 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 would 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 would provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which would 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 would be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (nor use of associated accelerants) would occur within 50 feet of listed plants.<br><br>For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent would implement MM BIO-1c.<br><br>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 would 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 would 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 would be required. | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA**<br>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 would implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:<br>• 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 would 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 would 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 would be determined by a qualified RPF or botanist and would 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.<br>• 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.<br>• Treatments would 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.<br>• No fire ignition (nor use of associated accelerants) would occur within the special-status plant buffer. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during treatment | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history would 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 would 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 MM BIO-1c would be implemented.<br><br>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 would 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 would be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation would be required.<br><br>*Project-Specific Measures*<br><br>*To avoid impacts on herbaceous annual forb species within suitable habitat, prescribed herbivory, prescribed burning, and mowing would be restricted to outside the vegetative growth period in occupied habitat until after the species has set seed. Manual treatments may occur with an avoidance buffer under the advisory of a qualified RPF or biologist. No Project-related ground disturbance would occur generally within a 50-foot buffer of these identified locations. The size and shape of the generally 50-foot buffer may be adjusted if a qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts on listed plants.*<br><br>*To avoid impacts on special-status herbaceous perennial forb species within suitable habitat, prescribed herbivory, prescribed burning, and mowing would be restricted to outside the vegetative grown period in occupied habitat until after the species has set seed. Manual treatments may occur with an avoidance buffer.* | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *A no-disturbance buffer of at 50 feet within which vegetation treatment activities would not occur unless a qualified RPF or biologist determines that the species would benefit from treatment in the occupied habitat area. The size and shape of the generally 50-foot buffer may be adjusted if a qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts.*<br><br>*To avoid impacts on persistent above-ground perennial species within suitable habitat, a no-disturbance buffer of at 50 feet within which vegetation treatment activities would not occur unless a qualified RPF or biologist determines that the species would benefit from treatment in the occupied habitat area. The size and shape of the generally 50-foot buffer may be adjusted if a qualified RPF or biologist determines that a smaller or larger buffer would be sufficient to avoid impacts on listed plants.*<br><br>*If pre-treatment surveys are conducted outside of the bloom period for these species, and individuals within the same genus of special-status plants are identified, these individuals would be treated as potentially special-status species and would be offered the same protective buffer for avoidance.* | | | | |
| **MM BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants**<br><br>If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under MMs BIO-1a and 1b, the project proponent would prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants would be compensated. The project proponent would consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the plan would be submitted to CDFW and/or USFWS (as appropriate) for review and comment.<br><br>The first priority for compensatory mitigation would be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options would be implemented by the project proponent instead:<br><br>• Creating populations on mitigation-sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species); | Initial Treatment: N<br><br>Treatment Maintenance: N | N/A | N/A | N/A |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • Purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and<br>• If the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future.<br>If relocation efforts are part of the Compensatory Mitigation Plan, the plan would include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards would be applied for relocation:<br>• The extent of occupied area would be substantially similar to the affected occupied habitat and would be suitable for self-producing populations. Re-located/re-established populations would be considered suitable for self-producing when:<br>○ Habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and<br>○ Reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.<br>If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan would include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee title). The project proponent would submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations would be preserved in perpetuity.<br>If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures would be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.<br><br>If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan would include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.<br><br>If the loss of occupied habitat cannot be offset (e.g., if preservation of existing populations or creation of new populations through relocation efforts are not available for a certain species), and as a result, treatment activities would substantially reduce the number or restrict the range of listed plant species, then the treatment would not qualify as within the scope of this PEIR.<br><br>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above. | | | | |

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| **MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)**<br>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 would avoid adverse effects to the species by implementing the following:<br><u>Avoid Mortality, Injury, or Disturbance of Individuals</u><br>The project proponent would implement one of the following two measures to avoid mortality, injury, or disturbance of individuals:<br>1. Treatment would not be implemented within the occupied habitat. Any treatment activities outside occupied habitat would be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species would not occur, as determined by a qualified RPF or biologist using the most current and commonly accepted science and considering published agency guidance; OR<br>2. Treatment would 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 would 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.<br>• 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 would implement MM BIO-2c.<br>• 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 would be avoided.<br><u>Maintain Habitat Function</u><br>The project proponent would design treatment activities to maintain the habitat function, by implementing the following:<br>• While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist would 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features would be marked and treatments applied to the features would be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features would be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.<br>• 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 would 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.<br>• A qualified RPF or biologist would determine if, after implementation of the impact avoidance measures listed above, the habitat function would 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 would consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment would not maintain habitat function for the special-status species, the project proponent would implement MM BIO-2c.<br>*Project-Specific Measures*<br>*<u>California Red-Legged Frog and California Tiger Salamander</u>*<br>*If California red-legged frog, California newt, and western pond turtle are assumed present or detected during protocol-level surveys, the following measures would be implemented:*<br>*Mechanized operations would be shut down when the precipitation threshold is met, and the shutdown period would begin once the precipitation event has ended.*<br>*If California red-legged frog, California newt, or western pond turtle are detected during focused surveys, the project proponent would require flagging areas for avoidance in which no treatment activities would occur, biological monitoring, or other measures recommended by CDFW as necessary to avoid injury to or mortality of these species. If impacts would remain significant under CEQA and the project proponent determines that | | | | |

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| *additional mitigation is necessary to reduce significant impacts, MM BIO-2c would be required, and incidental take permitting under CESA may be required pursuant to consultation with CDFW.* | | | | |
| *<u>California Red-Legged Frog</u>*<br>*During the dispersal season from October 15 (or after the first rainfall of the year) through April 15, pre-treatment visual surveys would be performed daily by a RPF, qualified biologist, or biological monitor, prior to implementation of any treatment activities (i.e., mechanical, manual, and herbicide) within breeding, upland, or dispersal habitat as determined by a qualified biologist. If a California red-legged frog is found during pre-activity surveys or enters the Project site during treatment activities, all work would stop within a non-disturbance buffer of 100 feet around the individual unless the qualified RPF or biologist determines that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities would cease within the buffer until the animal leaves on its own, and the occurrence would be reported to the qualified RPF or biologist and USFWS.*<br>*Specific habitat features (i.e., log, tree, debris pile) used by frogs observed on-site would be evaluated by a qualified RPF or biologist for habitat retention, if habitat retention is achievable while meeting project goals of reducing fuel loads.*<br>*All herbicide use during project implementation would 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 US EPA by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications would be allowed in California red-legged frog habitat under the following conditions.*<br>*Cut stump and basal bark applications may be used but would not be applied within 60 feet of breeding or non-breeding aquatic habitat.*<br>*If operators need to move or treat large woody debris greater than 12 inches in diameter, that piece of woody debris would be evaluated for the presence of California red-legged frog by a qualified biologist, qualified professional, RPF, RPF supervised designee, or a contractor who has been through the environmental awareness training.*<br>*All contractors, their employees, and agency personnel involved in the implementation of the project would check for the presence of any sensitive wildlife under or next to stationary vehicles prior to operating their* | | | | |

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| *vehicles. If a special-status reptile or amphibian is found, the qualified RPF or biologist would determine necessary next steps to avoid impact.*<br><br>*If pile burning is implemented, piles would be placed away from mammal burrows, rock outcrops, or scrub habitat that could serve as refugia for Alameda whipsnake, California newt, western pond turtle, or California red-legged frog. Within suitable habitat for California red-legged frog, burn piles would be burned gradually and lit from one end (the uphill side on slopes) to allow animals that may be using the pile for refuge to escape. When feasible, a single pile would be ignited, and all other piles in the vicinity of the burning pile would be carried to the burning pile and burned in the same location as the initial burn pile. When feasible, this strategy would minimize risk to wildlife using piles for refuge.*<br><br>*Whenever feasible in forested environments adjacent to scrublands (for Alameda whipsnake and California red-legged frog) or in oak woodland or grasslands (for California newt, western pond turtle, and California red-legged frog), understory vegetation would be removed first, followed by trees, to facilitate visibility of sensitive reptiles and amphibians by a qualified RPF or biologist.* | | | | |
| *<u>Alameda Whipsnake</u>*<br><br>*Within suitable Alameda whipsnake habitat, pre-treatment surveys would be combined with a focused survey to identify individuals and burrow sites within the Project footprint. If individuals are encountered, they would be protected with an appropriate avoidance buffer and would be allowed to leave the work area of their own volition.*<br><br>*Pre- and during-treatment Surveys. Either treatment will avoid occupied habitat or treatment will be implemented in such a way that it does not disturb Alameda whipsnake. If work occurs within occupied a qualified RPF or biologist be present on-site to monitor for Alameda whipsnake, flag areas for avoidance and establish no-work buffers. Implementing treatment activities within suitable Alameda whipsnake habitat would require focused surveys to determine presence of Alameda whipsnake each day prior to work at each new area. If crews are working within suitable Alameda whipsnake habitat, a qualified RPF or biologist would conduct ongoing focused pre-treatment surveys during treatment activities, adhering to methodologies recommended in Miller and Alvarez (2016). Within highly suitable habitat, surveys would be repeated in treatment areas immediately prior to vegetation removal to ensure that the species is not present prior to the start of work in each scrub area. A qualified RPF or biologist would check suitable refugia within the work area including vegetation and rock piles. When dense vegetation within suitable Alameda whipsnake habitat inhibits visual survey effectiveness, the biologist would work closely with the crew to* | | | | |

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| *intermittently cut a small amount of brush to allow surveys of small areas. Active surveys would be performed throughout the vegetation removal activity within suitable Alameda whipsnake habitat, and if work ceases more than one hour, the area would be re-surveyed prior to restarting work. During this survey effort, the qualified RPF or biologist would also advise the crew on avoidance of on-site potential refugia such as burrows and rock piles.*<br><br>*Prior to vegetation clearing activities within suitable Alameda whipsnake habitat, coverboards would be installed in key areas as determined by a RFP or qualified biologist. The coverboards would be strategically placed to provide refuge for the Alameda whipsnake leaving the work area. Coverboards would be inspected at the end of each workday and wildlife using them would be recorded.*<br><br>*Prior to operating stationary vehicles and equipment, all contractors, their employees, and agency personnel would check under and near vehicles/equipment for the presence of Alameda whipsnake and any wildlife that may have moved there. If Alameda whipsnake or any wildlife are discovered, the qualified biologist would be contacted immediately. The qualified biologist shall have the authority to halt Project activities until the animal leaves the area of its own accord, and shall contact USFWS, as necessary, to determine necessary steps. Manual removal of the species is not anticipated during vegetation treatment activities but permitted biologists with applicable CDFW SCPs and/or USFWS 10(a)(1)(A) permits would be on-call during Project activities.*<br><br>*Within suitable habitat, heavy equipment, including mowing equipment which may collapse burrows, would be utilized exclusively from stable operating surfaces such as established roads and trails.*<br><br>*Seasonal restrictions: Within suitable Alameda whipsnake habitat, mechanical treatment and prescribed burning would be avoided when temperatures are determined by the qualified biologist to be too low for Alameda whipsnake movement (soil surface temperatures reach 66 °F (19 °C) (Hammerson 1979)). Manual treatments may occur in cooler conditions, after the qualified biologist has thoroughly surveyed the area. In habitat suitable for Alameda whipsnake suitable winter retreats, as determined by a qualified biologist, prescribed broadcast burning would not occur between approximately November 1 and March 31 and typically when soil surface temperatures reach 66 °F (19 °C) (Hammerson 1979), or as determined by a qualified biologist.*<br><br>*Debris management: Contractors would immediately (i.e., the same day) process (i.e., remove completely from the treatment area, chip, permanently place within the treatment area for soil stabilization) all cut materials as they are produced to avoid attracting Alameda whipsnake to the vegetation piles. If processing* | | | | |

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| *within the same day is not feasible, the RPF or qualified biologist would advise crews on a suitable location for temporary storage of cut materials that cannot be processed immediately, or the materials would be deconstructed and investigated prior to processing under the advisory of the qualified RPF or biologist. Chipped materials would not be spread on suitable refugia for Alameda whipsnake such as rodent burrows or rocky outcrops.*<br><br>*Pile burning: The following measures apply when work occurs in suitable Alameda whipsnake habitat: During any season, vegetation piles for burning would either be burned the same day, or the pile would be deconstructed and investigated prior to burning. Placement of piles for burning would avoid suitable refugia for Alameda whipsnake, including large rodent burrows and rocky outcrops. Directional pile burning: Fires would be lit from one end of the pile (typically the uphill side on slopes) to allow Alameda whipsnake to escape, rather than lighting the whole pile at once.*<br><br>*Maintaining Alameda Whipsnake Habitat Function. Suitable Alameda whipsnake habitat is described in the USFWS Critical Habitat Designation (USFWS 2006) as comprising three habitat types: core scrub, dispersal/foraging habitat, and rocky outcrop habitat. Dispersal and foraging habitat includes woodland or annual grassland contiguous to core scrub habitat. The nature of the Project activities would not change the habitat functional of dispersal and foraging habitat, because large oak woodland trees would be retained, and scrub and grassland habitat would not be heavily targeted for treatment.*<br><br>*Core scrub habitat is described as shrub communities with a mosaic of open and closed canopy patches. USFWS defines scrub as coastal scrub, coyote brush scrub, or maritime chaparral areas (or "scrub") greater than 0.5 acre in size, or scrub areas greater than 0.2 acre in size that are within 50 feet of scrub patches greater than 0.5 acre in size (USFWS 2006). When work is occurring within core scrub habitat areas, the crew would work closely with the biologist to selectively remove scrub in a way that retains these dimensions, and therefore retains the overall habitat function while still serving the needs of the shaded fuel break. This technique has been used on previous projects and aims to provide a "scrub mosaic" that retains Alameda whipsnake habitat function. Scrub mosaic recommendations may vary depending on site conditions. The following techniques would be implemented during treatment: 1. Vegetation removal would occur in irregular, oblong shapes to maintain a natural condition. 2. Vegetation removal would avoid rocky outcrops. 3. The overall dominant habitat type would not be converted. 4. Vegetation removal would focus on dead, woody vegetation, and invasive plants.* | | | | |

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| *Preliminary and post-treatment surveys would be conducted that would assess the condition and acreage of Alameda whipsnake core scrub habitat. Post-treatment conditions would be assessed to ensure that there is no overall loss of habitat function within Alameda whipsnake core scrub. It should be noted that scrub and chaparral are transitional habitat types and, over time, canopy in these areas grows taller and denser, and larger tree species such as oak and madrone are naturally recruited and become increasingly dominant. Without any intervention, over a long period of time, chaparral and scrub communities would naturally convert to woodland and forested habitat. Thoughtful treatment of select areas that incorporates retention of scrub islands suitable for Alameda whipsnake core scrub is expected to be more effective in retaining key core scrub habitat for Alameda whipsnake than complete inaction in these areas. This is consistent with Alameda whipsnake habitat protections described in CalVTP MM BIO-2b.* | | | | |
| *Listed Avian Species*<br>*If it is infeasible to avoid vegetation treatment within nesting season, only manual treatment would be permitted and a RPF or biological monitor would be available on-site during treatment activities. If work occurs within the vicinity of an active nest, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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." No trees containing raptor nests would be removed; trees containing golden eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act.* | | | | |
| **MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)**<br>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 would avoid or minimize adverse effects to the species by implementing the following:<br>Avoid Mortality, Injury, or Disturbance of Individuals<br>The project proponent would implement the following to avoid mortality, injury, or disturbance of individuals: | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior to and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • For all treatment activities except prescribed burning, the project proponent would establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size would be determined by a qualified RPF or biologist using the most current, commonly accepted science and would consider published agency guidance; however, buffers would 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 would 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 would provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which would 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 would be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).<br>• No-disturbance buffers would be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity would 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 would 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 would be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician would have the authority to stop any treatment activities that could result in mortality, injury, or disturbance to special-status species.<br>• For prescribed burning, the project proponent would 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 would determine the period of time | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| within which prescribed burning could occur that would 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.<br><br>Maintain Habitat Function<br><br>For all treatment activities, the project proponent would design treatment activities to maintain the habitat function by implementing the following:<br><br>• While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist would 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 would be marked and treatments applied to the features would be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features would be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.<br><br>• 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 would 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.<br><br>• A qualified RPF or biologist would determine if, after implementation of the impact avoidance measures listed above, the habitat function would 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.<br><br>• A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history would 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 wildlife species' habitat or because the loss of special-status | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| 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 would 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 MM BIO-2c would be implemented.<br><br>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 would 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 would be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation would 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.<br><br>*Project-Specific Measures*<br><br>*Blainville's Horned Lizard*<br><br>*All contractors, their employees, and agency personnel involved in Project implementation would check for the presence of any sensitive wildlife under or next to stationary vehicles prior to moving their vehicles. If a special-status reptile or amphibian is found, a qualified RPF or biologist would be available to provide guidance and determine necessary next steps to avoid impact. If pile burning is implemented, piles would be placed away from suitable habitat for Blainville's horned lizard.*<br><br>*Western Pond Turtle and California Newt*<br><br>*To avoid impacts on western pond turtle and California newt, focused visual encounter surveys will be incorporated with pre-treatment surveys within suitable habitat to detect species and potentially suitable burrows. Surveys would be conducted within approximately 1,500 feet of aquatic habitat (e.g., streams, ponds). If upland habitat with suitable burrows/nest sites for western pond turtle is detected, the qualified* | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *RPF or biologist would inspect the burrow to determine whether it is occupied. If western pond turtle or California newt are detected or assumed present, MM BIO-2b for these species would be implemented.*<br>*Within suitable habitat where western pond turtle or California new are detected or assumed present, following measures would be implemented:*<br>• *Mechanized operations would be shut down when the precipitation threshold is met, and the shutdown period would begin once the precipitation event has ended.*<br>• *If treatment activities occur within or adjacent to suitable or occupied habitat for special-status aquatic reptile and amphibians, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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."*<br>• *If impacts would remain significant under CEQA and the Project proponent determines that additional mitigation is necessary to reduce significant impacts, MM BIO-2c would be required, and incidental take permitting under CESA may be required pursuant to consultation with CDFW.*<br>• *If a special-status aquatic reptile or amphibian enters the Project site during treatment activities, all work would stop within a non-disturbance buffer around the individual as determined by a qualified RPF or biologist. Treatment activities would cease within the buffer until the animal leaves on its own volition.*<br>• *Within California red-legged frog federally-designated Critical Habitat, all herbicide use during Project implementation would 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 US EPA by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications would be allowed in suitable habitat for special-status aquatic reptiles and amphibians under the following conditions:*<br>  ○ *Cut stump and basal bark applications may be used but would not be applied within 60 feet of breeding or non-breeding aquatic habitat.*<br>  ○ *If operators need to move or treat large woody debris greater than 12 inches in diameter, that piece of woody debris would be evaluated for the presence of California red-legged frog* | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *by a qualified biologist, qualified professional, RPF, RPF-supervised designee, or a contractor who has been through the environmental awareness training.*<br>• *All contractors, their employees, and agency personnel involved in the implementation of the Project would check for the presence of sensitive wildlife under or next to stationary vehicles prior to operating their vehicles. If a special-status reptile or amphibian is found, the qualified RPF or biologist would determine necessary next steps to avoid impact.*<br>• *Pile burning treatment would avoid potential refugia for special-status aquatic reptile and amphibian species.*<br>• *Within suitable habitat, heavy equipment, including mowing equipment which may collapse burrows, would be utilized exclusively from stable operating surfaces such as established roads and trails.* | | | | |
| *Special-Status Avian Species*<br>*If it is infeasible to avoid vegetation treatment within nesting season, only manual treatment would be permitted and a RPF or biological monitor would be available during treatment activities. If work occurs within the vicinity of an active nest, MM BIO-2b requires flagging areas for avoidance and establishing no-work buffers. MM BIO-2b also states: "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." A biological monitor would be present on-site during work within the vicinity of raptor, eagle, or special-status bird nests. No trees containing raptor nests would be removed. Additionally, trees containing golden eagle nests would not be removed pursuant to the Bald and Golden Eagle Protection Act.* | | | | |
| *Special-Status Bats*<br>*Due to the difficulty of detecting bats during traditional daytime surveys, pre-treatment bat surveys would incorporate identifying potential bat habitat and roosting structures. If potentially suitable roosting structures occur in Project areas, a qualified bat biologist would conduct a Level 1 survey (year-round) for evidence of bat occupation, specifically looking for signs of day-roosting such as fecal matter, staining, and carcasses. Based on the results of Level 1 surveys, day and night emergence Level 2 surveys would be performed (April 1 to September 15). If special-status bat roosts are detected during focused surveys, a no-disturbance buffer of 250 feet would be established around active pallid bat, Townsend's big-eared bat, and other special-status bat roosts, and mechanical treatments, manual treatments, and broadcast and pile burning would not occur within this buffer. MM BIO-2b also states: "A qualified RPF, biologist, or biological* | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment."*<br><br>*Bats may be excluded from roost locations by a qualified bat biologist or under the direct advisory of a qualified bat biologist from roosting structures in the work area only during the periods from mid-February until mid-April (hibernation), and from late August until mid-October (to avoid hibernation and maternity season). Bat elimination would follow BMPs and must include the combination of two actions: 1) careful blockage of all openings that are large enough to allow bats to enter, and 2) installation of one-way valves placed on the actively used openings to allow the bats to fly outside as they normally would but not to re-enter. After 7-10 days, the one-way valves are removed, and the remaining openings are blocked or sealed. Bat exclusion must be overseen by a qualified bat biologist.* | | | | |
| *San Francisco Dusky-Footed Woodrat*<br><br>*If a San Francisco dusky-footed woodrat nest is identified during focused surveys, a minimum 10-foot no-disturbance buffer would be established around the nest which would be assumed to be occupied. This buffer would include surrounding vegetation, including the vegetative canopy above the nest. The size of the buffer would be determined by the qualified RPF or biologist, and no treatment activities would occur within this buffer. If any individual of this species is detected during pre-activity surveys or work, the animal would be allowed to leave the area of its own volition.*<br><br>*Nests that are deemed hazardous by the Project proponent, such as those creating ladder fuels, may be dismantled under the supervision of a qualified biologist using a phased approach that allows woodrats to safely disperse. The following additional measures would be implemented to when dismantling a woodrat nest:*<br><br>• *Prior to any nest removal, safety measures would be employed to minimize potential human exposure to possible diseases carried by woodrats. Adequate protection, such as protective clothing, equipment and tools, gloves, and appropriate masks, to ensure safety regarding viruses and diseases potentially carried by rodents, is recommended.*<br><br>• *Vegetation immediately surrounding each nest to be removed would be cleared without disturbing the nest, to prevent displaced woodrats from taking cover in dense vegetation within the work area. All vegetation would be hauled off-site immediately. No brush piles or dense understory vegetation that* | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *could be used for cover by woodrats would be retained in the nest removal area after the nest is removed.*<br>• *Nest removal efforts would not take place during inclement or extreme weather conditions and would take place at dusk or dawn when woodrats are least susceptible to predators. Each nest would be carefully dismantled using hand tools (e.g., a rake and pitchfork).*<br>• *If a litter of young is found or suspected, the nest material would be replaced and the nest left alone for 2 to 3 weeks; after this time, the nest would be rechecked to verify that the young are capable of independent survival before proceeding with nest dismantling.*<br>*American Badger*<br>*If American badger is detected during focused surveys or assumed present, a no-disturbance buffer would be established around the den or habitat assumed to be occupied, the size of which would be determined by the qualified RPF or biologist, and no treatment activities would occur within this buffer. MM BIO-2b also states: "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 any individual of this species is detected during pre-activity surveys or work, the animal would be allowed to leave the area of its own volition.* | | | | |
| **MM BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)**<br>If the provisions of MMs BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent would compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or would provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.<br>Compensation may include:<br>1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and<br>2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| or removing existing movement barriers or other existing features that are adversely affecting the species).<br><br>The project proponent would prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:<br><br>1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan would include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent would submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat would be preserved in perpetuity.<br>2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan would include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.<br><br>Review requirements are as follows:<br><br>• The project proponent would consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.<br>• For species listed under ESA or CESA or a California Fully Protected Species, the project proponent would submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment.<br>• For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information.<br><br>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above. | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)**<br>If elderberry shrubs within the documented range of valley elderberry longhorn beetle are identified during review and surveys for SPR BIO-1, and valley elderberry longhorn beetle or likely occupied suitable elderberry habitat (e.g., within riparian, within historic riparian, containing exit holes) is confirmed to be present during protocol-level surveys following the protocol outlined in USFWS 2017 per SPR BIO-10, the following protective measures would be implemented to avoid and minimize impacts to valley elderberry longhorn beetle:<br>• If elderberry shrubs are 165 feet or more from the treatment area, and treatment activities would not encroach within this distance, direct or indirect impacts are not expected, and further mitigation is not required.<br>• If elderberry shrubs are located within 165 feet of the treatment area, the following measures would be implemented:<br>○ A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant would be fenced or flagged and maintained to avoid direct impacts (e.g., damage to root system) that could damage or kill the plant, with the exception of the following activities:<br>▪ Manual trimming of elderberry shrubs would only occur between November and February and would avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects on valley elderberry longhorn beetle.<br>▪ Manual or mechanical vegetation treatment within the drip line of any elderberry shrub would be limited to the season when adults are not active (August–February), would be limited to methods that do not cause ground disturbance, and would avoid damaging the elderberry.<br>○ A qualified RPF, biologist, or biological technician familiar with valley elderberry longhorn beetle and its life history would monitor the work area to verify the avoidance and minimization measures are implemented. The qualified RPF, biologist, or biological technician would have the authority to stop any treatment activities that could result in potential adverse effects to valley elderberry longhorn beetle. | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of valley elderberry longhorn beetle or degradation of occupied habitat such that its function would not be maintained, the project proponent would implement MM BIO-2c. | | | | |
| **MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)**<br>If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures would be implemented:<br>• Treatment areas within the range of these species would be surveyed for the host plant for each species (Table 3.6-34).<br>• Host plants for federally listed butterflies within the occupied habitat would be marked with high-visibility flagging, fencing, or stakes, and no treatment activities would occur within 10 feet of these plants.<br>• Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type would not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore.<br>• Treatment areas that are not occupied but are within the range of the federally listed butterfly would be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year.<br>• Treatments would be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained.<br>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent would implement MM BIO-2c.<br>**CESA and ESA Listed Species.** A qualified RPF or biologist would determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment would result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function would remain for the affected species. For species listed under CESA or ESA or that are fully protected, the | Initial Treatment: Y<br>Treatment Maintenance: Y | Before and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| qualified RPF or biologist would consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent would implement MM BIO-2c.<br><br>**Other Special-Status Species**. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history would 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 species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation would be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then MM BIO-2c would be implemented.<br><br>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist would demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation would be required. | | | | |

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

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

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *Project-Specific Measures*<br><br>*<u>Monarch Butterfly</u>*<br><br>*Pre-treatment surveys would incorporate a focused survey to identify suitable larval and overwintering habitat and all life stages of monarch butterfly. If monarch butterfly, monarch larvae host plants (e.g.,* Asclepias californica, A. fascicularis, A. speciosa*) or overwintering roost trees are detected, or the species is assumed to be present in lieu of conducting surveys, the Project proponent would avoid or minimize adverse effects on the species by avoiding treatment activities in suitable monarch habitat during overwintering or larval periods. If monarch overwintering groups or larvae are detected, an appropriate buffer would be established as determined by a qualified RPF or biologist. Avoidance buffers would be flagged by the Project proponent within which no treatment activities would occur, a qualified biologist or RPF would be available to provide guidance as needed. MM BIO-2b also states: "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."* | | | | |
| **MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)**<br><br>If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures would be implemented:<br><br>• To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment activities would not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species.<br><br>• To avoid and minimize impacts to Casey's June beetle, Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*), Delta green ground beetle (*Elaphrus virisis*), Morro shoulderband snail, Ohlone tiger beetle (*Cicindela ohlone*), and Trinity bristle snail, treatment activities would not occur within habitat in the range of these species that is deemed suitable by a qualified RPF or biologist with familiarity of the species. | Initial Treatment: N<br><br>Treatment Maintenance: N | N/A | N/A | N/A |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance to listed beetles, flies, grasshoppers, and snails, or degradation of suitable habitat such that its function would not be maintained, the project proponent would implement MM BIO-2c. | | | | |
| **MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)**<br>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 would implement the following measures, as feasible:<br>• Prescribed burning within occupied or suitable habitat for special-status bumble bees would occur from October through February to avoid the bumble bee flight season.<br>• Treatment areas in occupied or suitable habitat would 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.<br>• Treatments would 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 would be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area).<br>• Herbicides would not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March–September).<br>**CESA and ESA Listed Species.** A qualified RPF or biologist would determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment would result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function would remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist would 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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Before and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| 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 would implement MM BIO-2c.<br><br>**Other Special-Status Species.** A qualified RPF or biologist with knowledge of the special-status species' habitat and life history would 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 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 would 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 applying feasible treatment design alternatives and impact minimization measures, then MM BIO-2c would be implemented.<br><br>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 would 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 would be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation would be required.<br><br>*Project-Specific Measures*<br><br>*CDFW (2023) issued "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species", which offers a survey methodology for Crotch's and obscure bumble bees, among others. In lieu of or in addition to surveys, the Project proponent may choose to assume presence and rely on habitat as an indicator of presence. Crew members and contractors would be trained to identify and avoid this species if encountered, and a biologist would be available as needed to provide guidance when crews are working within suitable bumble bee habitat. If identified, these burrows would be protected with an avoidance buffer.* | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)**<br>The project proponent would implement the following measure if treatment activities are planned within the range of desert bighorn sheep, peninsular bighorn sheep, Sierra Nevada bighorn sheep, or pronghorn:<br>• Prescribed herbivory activities would be prohibited within a 14-mile buffer around suitable habitat for any species of bighorn sheep within the range of these species consistent with the more stringent recommendations in the bighorn sheep recovery plan (USFWS 2007).<br>• Prescribed herbivory activities would be avoided within the range of pronghorn where feasible (where this range does not overlap with the range of any species of bighorn sheep). | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |
| **MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands**<br>The project proponent would implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:<br>• Reference Appendix 2, Table A2 of California vegetation (Sawyer, Keeler-Wolf, and Evens 2009 or current version, including updated natural communities data online) 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 would also be determined.<br>• 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 would 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 Van Wagtendonk et al. 2018 and Sawyer, Keeler-Wolf, and Evens 2009 or current version, including updated natural communities data online). Treatments would 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. | Initial Treatment: Y<br>Treatment Maintenance: Y | Before and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • To the extent feasible, no fuel breaks would be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).<br>• To the extent feasible, fuel breaks would 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 would be installed, and they would 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 would be converted to create the fuel break).<br>• 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 Van Wagtendonk et al. 2018 and Sawyer, Keeler-Wolf, and Evens 2009 or current version, including updated natural communities data online).<br>• 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 would 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.<br>The feasibility of implementing the avoidance measures would be determined by the project proponent based on whether implementation of this MM would 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 would 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 | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| PSA, this would be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).<br><br>A qualified RPF or botanist with knowledge of the affected sensitive natural community would 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 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 would 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 MM BIO-3b would be implemented.<br><br>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 would 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 would 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 would be required. | | | | |
| **MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands**<br><br>If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under MM BIO-3a, the project proponent would implement the following actions:<br><br>• Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by:<br>  ○ Restoring sensitive natural community or oak woodland functions and acreage within the treatment area; | Initial Treatment: N<br><br>Treatment Maintenance: N | N/A | N/A | N/A |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| ○ Restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or<br>○ Preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function.<br>• The project proponent would prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:<br>1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan would include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent would submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat would be preserved in perpetuity.<br>2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan would include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.<br>The project proponent would consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. | | | | |
| **MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat**<br>If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent would implement the following: | Initial Treatment: N<br>Treatment Maintenance: N | N/A | N/A | N/A |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| • Compensate for unavoidable losses of riparian habitat acreage and function by:<br>  ○ Restoring riparian habitat functions and acreage within the treatment area;<br>  ○ Restoring degraded riparian habitat outside of the treatment area;<br>  ○ Purchasing riparian habitat credits at a CDFW-approved mitigation bank; or<br>  ○ Preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value.<br>• The project proponent would prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:<br>  1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan would include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent would submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations would be preserved in perpetuity.<br>  2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan would include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.<br>The project proponent would consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above. | | | | |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| **MM BIO-4: Avoid State and Federally Protected Wetlands**<br>Impacts to wetlands would be avoided using the following measures:<br>• The qualified RPF or biologist would 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.<br>• The qualified RPF or biologist would delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).<br>• A qualified RPF or biologist would 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 would be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone would be determined in coordination with the qualified RPF or biologist and would 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.<br>• A qualified RPF or biological technician would periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.<br>• Within this buffer, herbicide application is prohibited.<br>• 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.<br>• Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:<br>○ No special-status species are present in the wetland habitat.<br>○ The wetland habitat function would be maintained. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| ○ The prescribed burn is within the normal fire return interval for the wetland vegetation types present.<br>○ Fire containment lines and pile burning are prohibited within the buffer.<br>• No fire ignition (nor use of associated accelerants) would occur within the wetland buffer. | | | | |
| **MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites**<br>The project proponent would implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10:<br>• **Retain Known Nursery Sites.** A qualified RPF or biologist would identify the important habitat features of the wildlife nursery and, prior to treatment activities, would mark these features for avoidance and retention during treatment.<br>• **Establish Avoidance Buffers**. The project proponent would 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 would 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 would 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 would be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance would be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician would have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.<br>*Project-Specific Measures*<br>*Pre-treatment surveys would be combined with a focused nesting (birds) and maternity roost (bats) survey during appropriate breeding season within the Project footprint and at minimum 50-foot buffer.*<br>*<u>Nesting Birds</u>*<br>*Pre-treatment surveys would incorporate a focused nesting survey during nesting season to identify active nests within the Project footprint and would be performed by qualified RPF or biologist. Nesting bird surveys would occur no more than 7 days prior to work to ensure that no nests would be disturbed during treatment* | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| *activities. If work pauses for more than 7 days, a follow-up survey would be conducted by qualified RPF or biologist prior to the restarting of work. Appropriate survey areas would be determined by the qualified RPF or biologist depending on the Project footprint, type of activity proposed, and suitable habitat for nesting birds. Surveys would be conducted during periods of high bird activity (i.e., 1-3 hours after sunrise and 1-3 hours before sunset) and under suitable weather conditions for detecting nesting birds. If the qualified RPF or biologist determines that visibility is significantly obstructed due to on-site conditions (e.g., access issues, rain, fog, smoke, or sound disturbance [including high wind]), surveys would be deferred until conditions are suitable for nest detection. Should the qualified RPF or biologist encounter an active nest of a migratory bird species, the biologist would establish an avoidance buffer of at least 50 feet until the nest is fledged or deemed inactive. If it is infeasible to avoid vegetation treatment within nesting season, only manual treatment would be permitted, and the Project proponent will work closely with a qualified RPF or biologist. A biological monitor would be present on-site for work within the vicinity of raptor or eagle nests. No trees containing raptor nests would be removed.* | | | | |
| **Greenhouse Gas Emissions** | | | | |
| **MM GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns**<br>When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn would incorporate feasible methods for reducing GHG emissions, including the following, which are identified in NWCG (2020):<br>• Reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;<br>• Reduce the total area burned through mosaic burning;<br>• Burn when fuels have a higher fuel moisture content;<br>• Reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and<br>• Schedule burns before new fuels appear.<br>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 | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior and during | CCCFPD | CCCFPD |

| MITIGATION MEASURES | APPLICABLE? (Y/N) | TIMING | IMPLEMENTING ENTITY | VERIFYING/ MONITORING ENTITY |
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| 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.<br>The project proponent would document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design. | | | | |
| **Hazardous Materials, Public Health, and Safety** | | | | |
| **MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites**<br>Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents would 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 would 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 would be marked, and no prescribed burning or soil disturbing treatment activities would 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. | Initial Treatment: Y<br>Treatment Maintenance: Y | Prior | CCCFPD | CCCFPD |
| **Noise** | | | | |
| **MM NOI-1: Avoid Conflicts with Local Noise Ordinances During Prescribed Herbivory**<br>Prior to commencing prescribed herbivory treatments, CCCFPD would post signs including contact information, including a daytime telephone number, of the project representative, who may be contacted regarding noise complaints. CCCFPD would take into consideration future use of herbivory treatments in areas that receive noise complaints and may adjust the limits of treatment areas to be further from sensitive receptors. | Y | Prior, During | CCCFPD | CCCFPD |

# Attachment B

## Biological Resources Report

(placeholder)

# Attachment C

## Cultural Resources Report (Confidential)

(placeholder)

# Attachment D

## Statement of Overriding Considerations

(placeholder)