THE CALIFORNIA VEGETATION TREATMENT PROGRAM ENVIRONMENTAL CHECKLIST

PROJECT-SPECIFIC ANALYSIS/ ADDENDUM TO THE CALVTP PROGRAM ENVIRONMENTAL IMPACT REPORT

INTRODUCTION

The proposed San Jose Water Company (SJW) Forest Health Program – P1 (project) consists of vegetation treatments to selectively thin dense tree stands, diseased tree populations, and shrubs to improve forest health, increase climate resiliency, and reduce the risk of wildfire. The project area encompasses approximately 1,947.9 acres in southwest Santa Clara County on the east and west sides of California State Route (SR) 17. The project is located entirely on lands owned by SJW, a privately owned water company with headquarters in San Jose, California.

PROJECT OVERVIEW AND DOCUMENT PURPOSE

Over the past two decades, communities across California have become increasingly affected by wildfire. Some factors that have led to these conditions include the ban of cultural burning since the late 1800s, fire exclusion over the last 100 years, a lack of vegetation management, climate change, periods of successive drought, and substantial development in the wildland-urban interface (WUI). These factors have resulted in overstocked forests and high fuel loading, in turn creating dangerous conditions for wildfire ignition often leading to catastrophic wildfire.

These factors have contributed to substantial change in forested landscapes across Santa Clara County, which have experienced over one hundred years of fire suppression, a climate that is becoming warmer and drier, and prevalence of sudden oak death (caused by the pathogen *Phytophthora ramorum*). The adverse toll on regional ecosystems and overall forest health is evident. Compounding these effects are a suite of related ecological feedbacks, including conifer species displacing hardwoods and other fire resilient native plant species, reducing biodiversity and affecting the suitability of these habitats for rare and special-status wildlife and plants. In addition, altered fire regimes and increased fuel loads are driving larger and more catastrophic wildfires. As a result, these systems have undergone unsustainable structural and compositional changes at the ecosystem level that require environmentally sensitive landscape-level treatments to redirect the effects of changing climatic and ecological conditions.

In June of 2020, SJW, Santa Clara County Fire Safe Council, Midpeninsula Regional Open Space District, and Santa Clara County Parks (Partners) formed the Los Gatos Creek Watershed Collaborative (LGCWC) to design and implement landscape level treatments to improve forest composition and structure that would promote a more fire-resilient condition and alter the course of untenable fuel conditions that these important ecosystems are experiencing.

Treatments are designed by the LGCWC to meet the following goals:

- Establish healthy, resilient, fire-adapted ecosystems to protect and conserve natural resources.
- Protect upper watersheds where important regional water supplies originate.
- Promote the long-term storage of carbon and reduce the severity of catastrophic wildfire, thereby increasing community and forest ecosystem protection.

The proposed project is one component of the LGCWC's landscape-scale wildfire resilience planning efforts. It builds upon the Santa Clara County Firesafe Council Governor's Highway 17 project, multiple projects along Highway 35, and a series of projects along Summit Road by conducting ecologically restorative forest health treatments that increase climate resiliency, biological diversity, and reduce the severity of wildfire near communities within the Los Gatos Creek Watershed. Figures 1 and 2 display the regenerative capacity of coast redwood (*Sequoia sempervirens*) forest following historic anthropogenic disturbance within the project area. The project focuses on forest health fuels reduction vegetation and tree treatments to create shaded fuel breaks, reduce ladder fuels, lower fire intensity and severity, and reduce invasive species. Reducing competition in the understory and treating hazard or diseased trees creates healthier and more sustainable forest conditions, increasing forest resilience and reducing wildfire risk.

Figure 1. Hillsides clearcut above Wright's Station, prior to WWII. Wrights Station Bridge pictured on the left side of the photo. Red dot indicates where Figure 2 photo was taken from looking back up the bridge towards the tunnel.

Photo credit: Stephen Harrington

Figure 2. Photo taken from Wright's Station bridge, 2022 showing regenerative capacity of the area.

The LGCWC received a Forest Health Grant (FHG) from the California Department of Forestry and Fire Protection (CAL FIRE) for each of the Partners to implement treatments, including SJW. This Project-specific Analysis (PSA)/ Addendum to the Program Environmental Impact Report (PEIR) for the California Vegetation Treatment Program (CalVTP) (Addendum) addresses and provides CEQA compliance for implementation of treatments (including maintenance treatments) throughout 1,947.9-acres owned by SJW. The FHG allocates funding to implement treatments on 310.7 acres within the project area. This funding allocation would support implementation of proposed vegetation treatments consistent with the CalVTP. In addition, 40.6 acres of the project area are identified as FHG-contingency areas. FHG-contingency areas are where treatments could be implemented if all of the proposed 310.7 acres are not able to be treated because of operational considerations, economic infeasibility, or avoidance of sensitive resources, including but not limited to: buffers to avoid impacts to cultural sites, presence of sensitive species or habitat, excessive slopes, and road limitations. These FHG-contingency areas have been identified to provide sufficient treatment areas to make full use of FHG grant funding for maximizing achievement of forest health fuels reduction goals. This PSA/Addendum addresses treatments within the entire project area collectively, encompassing FHG-proposed, FHG-contingency, and the remainder of the 1,947.9 acres, unless a specific distinction between these three areas is necessary.

SJW does not anticipate that it would treat every acre within the 1947.9-acre project area. The purpose of a more expansive project area is to facilitate consideration of key strategic areas among adjacent large and small landowners in upcoming planning efforts such as updated Unit Fire Plans, Community Wildfire Prevention Plans, or other strategic planning efforts. The area encompassed in this PSA can act as a datum of permitted landscape from which adjacent project opportunities and collaborations can be created to increase the health and safety of the forest and the communities that surround it.

Information related to the CalVTP is available at: https://bof.fire.ca.gov/projects-and-programs/calvtp/. This website contains links to:

- the CalVTP PEIR, referenced throughout this document;
- information on how to use CalVTP to streamline CEQA review of vegetation treatment projects; and
- the CalVTP Database webpage for data related to proposed, approved, and completed projects under the CalVTP.

Roles

This document is being prepared for San Jose Water and serves to provide CEQA compliance for the implementation of vegetation treatments that require a discretionary action by a state or local agency. The CEQA lead agency is CAL FIRE; its discretionary approval is the issuance of FHG funding to implement treatments within a portion of the project area. In this PSA/Addendum, SJW is referred to as the “implementing entity” reflecting its role as the lead implementer of treatments, landowner and land manager. As defined in the CalVTP PEIR, a project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. The PEIR contemplated that the primary discretionary approval of the public agency project proponent would be implementing the treatments, and associated standard project requirements (SPRs) and mitigation measures. However, for this proposed project, CAL FIRE’s discretionary approval is to provide grant funding and SJW will be implementing treatments and associated SPRs and mitigation measures. Therefore, as used in this PSA/Addendum, unless otherwise noted, SJW is the project proponent.

Purpose of This PSA/Addendum

This document serves as a PSA/Addendum to evaluate whether the proposed treatments would be within the scope of the CalVTP PEIR. As stated above, the treatment types and treatment activities are consistent with the CalVTP. Among the other criteria for determining whether a treatment project is within the scope of the CalVTP PEIR is whether it is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the PEIR). If a proposed vegetation treatment project is covered by the evaluation of environmental effects in the PEIR, it may be approved by a lead or responsible agency using a finding that the project is within the scope of the PEIR for its CEQA compliance, consistent with CEQA Guidelines Section 15168(c)(2).

Portions of the project area extend outside of the treatable landscape described in the CalVTP PEIR. In total, these areas encompass approximately 172.9 acres; however, they are dispersed in small sections of treatment areas (refer to Figures 7 and 8). The scattered array of acres outside of the CalVTP treatable landscape is due to the method by which the CalVTP treatable landscape was digitally developed and the resultant degree of mapping resolution. Using desktop applications to apply buffers around geographic and topographic features and demarcate jurisdictional boundaries (i.e., State Responsibility Area or SRA and Local Responsibility Area or LRA), the method resulted in some treatable landscape areas that are shown on maps to be disjoined and scattered and some that are inheld LRA areas surrounded

by SRA. If the areas of the proposed project outside of the CalVTP treatable landscape have essentially the same, or at least substantially similar, landscape conditions as the adjacent areas within the treatable landscape, the environmental analysis in the PEIR would be applicable.

The proposed project also includes use of an air curtain burner to process biomass and subsequent distribution of the resulting biochar. The purpose of air curtain burners is substantially similar to pile burning – a method to reduce fuel and/or remove biomass following treatment through incineration. Air curtain burners differ from pile burns in two main ways:

1. incineration of biomass materials occurs in a portable, open top metal burn chamber, rather than directly on soil; and

2. high velocity air is forced over the container (i.e., an air curtain), which traps particles within the burn chamber.

The essential function of an air curtain burner is to eliminate wood waste quickly in an efficient manner that nearly eliminates smoke and associated emissions. Additionally, during combustion of biomass, wood ashes collect in the bottom of the air curtain burner box insulating ash, starving the fuel of oxygen, and producing biochar. Additional details about the proposed use of air curtain burning is address below under “Biomass Disposal.”

Air curtain burning was not considered in the biomass disposal methods described in the CalVTP Program Description (Chapter 2) of the PEIR; however, its use was contemplated in Mitigation Measure GHG-2, which requires incorporation of feasible methods or technologies to reduce greenhouse gas emissions from prescribed burning, including pile burning. Pile burning is not proposed under this project; so, implementation of Mitigation Measure GHG-2 is not required. Therefore, the use of air curtain burning is considered an addition or change to the program, rather than implementation of mitigation. An Addendum to an EIR would be 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 CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168. In this case, there are no changed circumstances, but the proposed revisions or changes in the project, compared to the PEIR, is the inclusion of areas outside of the CalVTP treatable landscape and the addition of air curtain burning to the methods of biomass processing. The PSA checklist (refer to Section 4, “Project-Specific Analysis”) includes the criteria to support an Addendum to the CalVTP Program EIR for the inclusion of these changes. The checklist evaluates each resource in terms of whether the later treatment project, including the “changed condition” of additional geographic area and biomass processing methods, would result in significant impacts that would be substantially more severe than those covered in the Program EIR and/or would result in any new impacts that were not covered in the Program EIR.

This document serves as both a PSA and an Addendum to the CalVTP PEIR for CAL FIRE review and analysis under CEQA for the treatments proposed by SJW. It will provide environmental information to CAL FIRE in its consideration of the approval of grant funding allocations for treatments proposed to be implemented using the FHG and for other state and local agencies serving in the role of responsible agency with discretionary approvals for future treatments to use this PSA/Addendum for CEQA compliance.

This PSA/Addendum and attachments together support the finding that the proposed project is within the scope of the CalVTP PEIR. Each resource topic below includes a discussion of impacts related to that resource area followed by discussions of SPRs and mitigation measures that are applicable for avoiding, minimizing, and mitigating impacts for that resource area. Supplemental analysis and information supporting the impact discussions can be found in the corresponding attachments. A within the scope of the PEIR finding requires the following components:

- Description of the impact of the proposed treatment project (see impact discussions under Sections EC-1 through EC-16 below and Attachment B – Biological Resources)
- Summary of the impact in the CalVTP PEIR (see impact discussions under Sections EC-1 through EC-16 below)
- Evidence the project impact is addressed by the PEIR (see impact discussions under Sections EC-1 through EC-16 below and Attachment B – Biological Resources)
- CalVTP SPRs and MMs applicable to the proposed project (see SPR and MM discussions under Sections EC-1 through EC-16 below and Attachment A – Standard Project Requirements and Mitigation Measures)
- Conclusion regarding consistency with the PEIR (see impact discussions under Sections EC-1 through EC-16 below)

MITIGATION MONITORING AND REPORTING PROGRAM

This PSA/Addendum also serves as a mitigation monitoring and reporting program (MMRP) in accordance with CEQA and the State CEQA Guidelines (Public Resources Code Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097). A MMRP is required for approval of the proposed project because this PSA/Addendum identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. SPRs, which are environmental protection features included as part of the project description, have been incorporated to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. The numbering of SPRs and mitigation measures follows the numbering used in the PEIR. SPRs and mitigation measures that are referenced more than one resource section below are not duplicated in Attachment A. Instructions for project-specific implementation of certain SPRs and Mitigation Measures has been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, and the conditions and resources present within each treatment site. The MMRP requirements covered in this PSA/Addendum are described below.

- SPRs and Mitigation Measures – Brief discussions indicating whether an SPR or mitigation measure is applicable to this project are included under each resource section below.
- Implementing Entity & Timing Relative to Implementation – This identifies the agency responsible for implementing the measure and time frame in which the SPR or mitigation measure will be implemented for each applicable SPR/mitigation measure.
- Verifying/Monitoring Entity – This column identifies the party responsible for verifying and monitoring implementation of the SPR or mitigation measure.

This MMRP will be adopted by CAL FIRE with regard to its discretionary approval of the issuance of FHG funding to implement treatments within a portion of the project area. As this PSA/Addendum is used for CEQA compliance of future discretionary approvals by other state and local agencies related to treatments in the project area, those agencies will adopt separate MMRPs that specify the SPRs and mitigation measures relevant to their approval and within their jurisdiction. In coordination with the lead or responsible agency (CAL FIRE for the purposes of this FHG), SJW will document and describe the compliance of the project treatment work with the required SPRs and mitigation measures either by adapting a project-specific MMRP table or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

Existing Regional Conditions

The PSA area comprises diverse forested, shrub dominated and herbaceous vegetation communities. Climactic changes such as rising temperature, drought, and increased wildfire occurrence pose a threat to these communities, which are dominated in large part by impaired coast redwood forest. Rising temperatures, altered precipitation patterns, and increased wildfire frequency, intensity, and severity result from climatic changes evident within California's coast forest ecosystems today. Foresters, researchers, and land managers have used historical records, aerial imagery, and literature to understand how coast forests have changed over the past 200 years. For thousands of years, indigenous peoples lived in independent villages among the old growth forests and played a substantial role in fire ecology by stimulating fire intervals as frequent as 6-45 years (Frederickson 1984, Norman 2007). Old growth forests exhibited unique microclimate, regeneration and growth dynamics that displayed resiliency to climatic shifts (Sillett et al. 2020). Specific microclimate conditions in old growth forests included higher relative humidity, lower surface air temperatures, and lower ground level windspeeds (Stephens and Fry 2005). These characteristics made old growth forests resilient to fire and other disturbance. Once European settlers arrived, and especially after World War II, old growth harvest and clearing intensified. Today, old growth forests covers less than 4 percent of its historical range (Noss 2000). Second-growth forest stands have become established, but do not always display the same climate-resilient characteristics as most old growth stands. Untreated second-growth stands tend to be dense with high fuel-loads and many mid to small diameter trees.

Strategic preparations for expected ecosystem changes in the near future are an important consideration. Many historic vegetation communities are changing across the Santa Cruz Mountains. These include historic grasslands, which are transitioning into shrubland, woodland, or forest communities. Figures 3 and 4 display forest succession in the WUI following disturbance. Redwood stands that were clear-cut 100 years ago became re-established as second-growth, but typically display higher stand density than their old-growth counterparts. There are many areas within the Los Gatos Creek Watershed that are in a state of change, similar to the conditions depicted in the photos. In many cases, accepting these transitions may be necessary. However, stewardship to maintain strongholds of coast redwood, grasslands, and hardwood stands could increase overall climatic resiliency by reducing competition; this would increase nutrient and water availability for that ecotype. As species in these ecotypes are potentially pre-adapted to changing environments, they may be more resistant to climate change, biotic invasions, invasive species and other environmental changes. Climate change is ongoing and dynamic, so land management decisions made now will require continual reassessment and likely additional treatment over time.

Figure 3. Summit Road and Morrill Road, 1948. Re-growth following clear-cut.

Figure 4. Summit Road and Morrill Road, 2020. Overstocked second-growth forest.

Existing Stand Conditions within the Project Area

Most of the project area was clear-cut approximately 100 years ago and predominantly consists of second-growth conifers. The Austrian Gulch fire burned through part of the Los Gatos Creek Watershed in 1961 and the Lexington fire burned through a majority of Los Gatos Creek Watershed in 1985. Second growth coast redwood and Douglas-fir (*Pseudotsuga menziesii*) in these areas display evidence of the fire history in the lower parts of the bole through burn scars, swelling, and fire spikes.

The pathogen *Phytophthora ramorum* infects coastal forests throughout California and Oregon and kills susceptible species including tanoak, coast live oak (*Quercus agrifolia*), California black oak (*Quercus kellogii*), Shreve's oak (*Quercus shrevii*), canyon live oak (*Quercus*

chrysolepis), and madrone saplings. Host species that are in the project area include, but are not limited to California bay, coast redwood, and Douglas-fir.

CONIFERS

The project area ranges from approximately 200 to 400 trees per acre in the coast redwood – Douglas-fir forest types, especially in small (1 to 12 inches diameter at breast height [DBH]) and mid-range (12 to 24 inches DBH) trees (see Figure 5.) A healthier, less dense forest stand would be stocked at approximately 100 to 200 trees per acre in the coast redwood – Douglas-fir stand. While high densities stands do occur is some systems, they rarely occur at the scale and extent of many contemporary forests. These densely overstocked stands are considered impaired forest conditions that require ecologically restorative treatments, which predominantly focus on removal of trees less than 16 inches DBH to reduce competition. Management and treatment objectives in these impaired forests typically focus on increasing healthy growth of larger trees to allow sunlight to reach the forest floor to increase plant diversity, while also reducing ladder fuels and the associated fire hazard.

HARDWOODS

The 1985 Lexington fire burned most of the property with high severity, thereby opening the canopy for tanoak (*Notholithocarpus densiflorus*) and enabling California bay (*Umbellularia californica*) sprouts to flourish. As a result, there are now dense stands of small to mid-range DBH tanoaks and California bays. These overstocked conditions not only contribute to high fuel-loading, but also spread the pathogen, *Phytophthora ramorum*, which causes Sudden Oak Death (SOD) among hardwoods, especially tanoak. (See Figures 5 and 6.).

CHAPARRAL

Shrub species including manzanita (*Arctostaphylos* spp.) and coyote brush (*Baccharis piluaris*) are inherently dense plant communities and as a result, most wildfire ignitions in these vegetation types result in crown fire. Most shrub communities in the project area regenerated vigorously after the Lexington fire and have remained undisturbed since. Chaparral vegetation treatment in these areas will reduce the vegetation density in support of fire suppression along key fuel break areas such as roads, ridges or additional areas within the naturally dense plant community.

GRASSLANDS

Santa Clara County once held diverse grasslands which have been plowed, intensely grazed, and often reseeded with invasive annual species. A lack of fire or appropriate fire surrogate (e.g., grazing) has also resulted in encroachment of woody species including coyote brush in what was historically grassland. The recent fine scale vegetation map for Santa Clara County identifies approximately 17 acres of herbaceous vegetation in the project areas. Of those 17 acres, approximately half of those acres were identified as grassland mixed with exotic perennials, encroaching coyote bush (*Baccharis pillularis var.* consanguinea), and grey pine (*Pinus sabiniana*). This project seeks to maintain and improve the quality of grassland ecosystems, where appropriate, through the removal of encroaching shrubs and conifers as well as encouraging the persistence of perennial native grasses. Treatments to reduce the

encroachment of coyote bush and conifers, which would improve the resiliency of these habitats, would be accomplished by a reduction in density of encroaching woody species and conifers through removal by mechanical (mastication) or manual (hand) treatment activities.

Figure 5. Overstocked coast redwood and hardwood (less than 16-inches DBH)

Figure 6. Brown-out of tanoak foliage from sudden oak death

PROJECT INFORMATION

1. **Project Title:** San Jose Water Company (SJW) Forest Health Program – P1

2. **CAL FIRE Project Number** **8GG20604**

3. **CalVTP I.D. Number** 2022-13

4. **CEQA Lead Agency Name and Address:**
   CAL FIRE, Sacramento Headquarters
   715 P Street Sacramento, CA 95814

   Implementing Entity Name and Address:
   San Jose Water Company

   110 West Taylor St., San Jose, CA 95110-2131

5. **Contact Person Information and Phone Number:**

CEQA Lead Agency: CAL FIRE: Andrea Williams; Andrea.Williams@fire.ca.gov; 916-202-5744

Implementing Entity: San Jose Water: Jared Lewis; jared.Lewis@sjwater.com; 408-345-1911

6. **Project Location:**

The project is located in southwest Santa Clara County on the east and west sides of California State Route (SR) 17, east of SR 35 and northwest of Loma Prieta Road and Summit Road intersection. The project's range and township is: CA21 9S 1W Sec 6.

7. **Total Area to be Treated (acres):**

Total project area: 1947.9 acres (FHG Proposed: 310.7 acres, FHG Contingency: 40.6 acres)

8. **Description of Project:**

The CalVTP treatment types that would be implemented are ecological restoration and fuel breaks (see Figure 7 and 8). Proposed treatment activities that would be used to implement these treatment types are manual, mechanical, and limited herbicide treatments. The proposed CalVTP treatment activities are shown in Figures 9 and 10 and are summarized in Table 1, by type, below.

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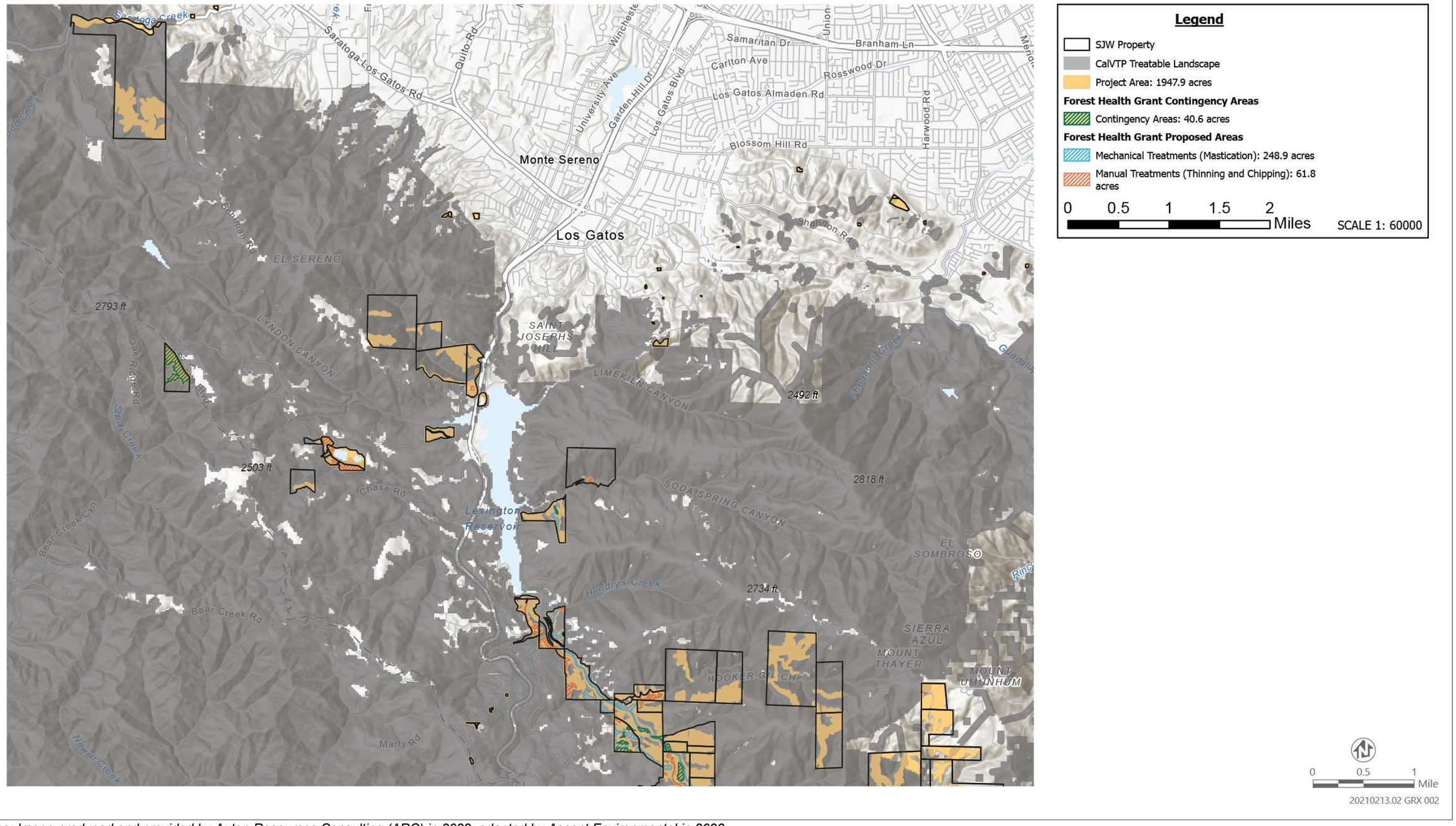
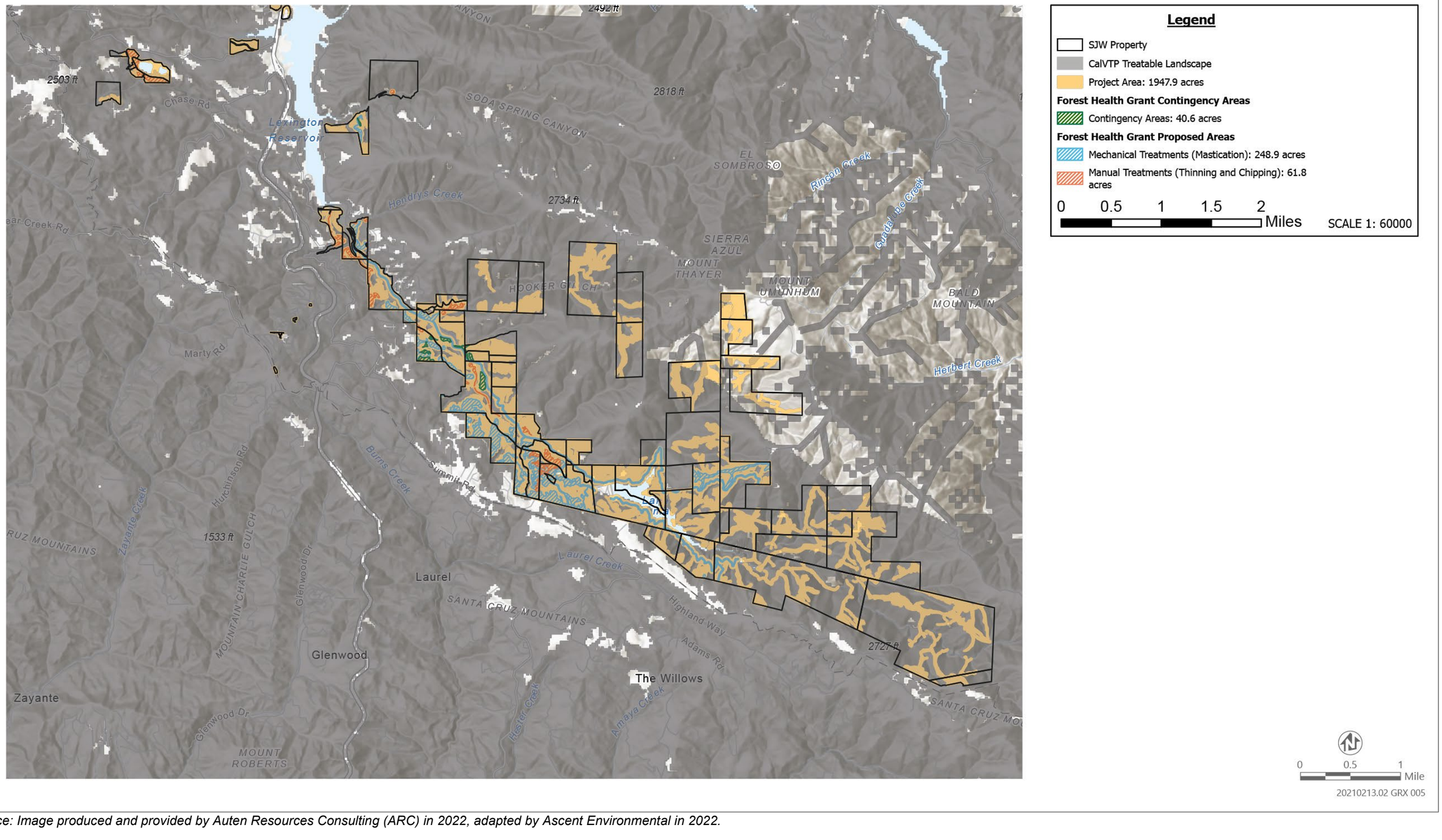


Source: Image produced and provided by Auten Resources Consulting (ARC) in 2022, adapted by Ascent Environmental in 2022.

Figure 7. San Jose Water (SJW) Project Area, North: Project Treatment Types



Source: Image produced and provided by Auten Resources Consulting (ARC) in 2022, adapted by Ascent Environmental in 2022.

Figure 8. San Jose Water (SJW) Project Area, South: Project Treatment Types

Table 1. Proposed CalVTP Treatment Types and Activities

CalVTP Treatment Type	Treatment Description	CalVTP Treatment Activities	Equipment Used for Treatments	Typical Duration of Treatments	Acres of Treatment
Ecological Restoration	Habitat improvement/fire resiliency treatments	Mechanical, Manual, Herbicide	3 tractors/ skidders, 6 masticators, 3 chippers, 10 chainsaws or hand saws, 10 brush cutters,	185 days	FHG proposed (Mechanical): 248.9 acres FHG proposed (Manual): 61.8 acres FHG contingency: 40.6 acres FHG proposed (Herbicide) 11.4 acres Project area: 1,311.2 Acres
Fuel Break	Treatment of areas with high density shrubs	Mechanical, Manual, Herbicide	3 tractors/ skidders, 6 masticators, 3 chippers, 10 chainsaws or hand saws, 10 brush cutters,	175 days	FHG proposed: 0 acres FHG contingency: 0 acres Project area: 636.7
TOTAL ACRES	FHG Proposed: 310.7 acres FHG Contingency: 40.6 acres Total project area: 1947.9 acres				

Proposed Treatments

Proposed treatments would occur in tree, shrub, and a very small amount of grassland fuel types as described in the CalVTP PEIR Section 2.4.1.Within the project area, tree fuel types are dominated by coast redwood forests mixed with Douglas-fir and hardwood stands. These forests have generally closed canopies with moderate to dense understory fuels. The removal of understory vegetation and ladder fuels in the tree fuel types would reduce the risk of ground fires spreading into the canopy.

The shrub fuel types to be treated consist predominately of native shrub and chaparral species, such as coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*), and manzanita (*Arctostaphylos* spp.). However, invasive species, such as French broom (*Genista monspessulana*), acacia (*Acacia* spp.), and eucalyptus (*Eucalyptus* spp.), have been documented in treatment areas. The reduction of fuels within all fuel types can prevent stand replacement that may occur in the event of a wildfire that spreads continuously through flammable foliage and woody materials.

The grassland fuel type consists primarily of exotic annuals, some perennials, encroaching coyote bush, and conifer species where treatments are proposed. These treatments would promote grassland recovery. Within Santa Clara County and throughout California, coastal prairies and bald hills were traditionally maintained by indigenous peoples through burning during the late summer or fall months. Repeated burning of grassland and coastal scrub habitats increased the cover of fire adapted species and promoted grassland and prairie vegetation types. With the absence of fire or a fire surrogate (e.g. grazing), shrubs and other fire-intolerant woody species will colonize previously open landscapes. Manual and mechanical treatments would be applied to reduce the density of encroaching woody species

and conifers, which would create a mosaic of vegetation focused on restoring grasslands and mimicking fire in these areas.

The proposed project comprises two treatment types: ecological restoration and fuel breaks. The vegetation treatment activities proposed to implement each of these treatment types are mechanical treatment, manual treatment, and targeted spot application of select herbicides. The treatment types and treatment activities are described below.

ECOLOGICAL RESTORATION AREAS

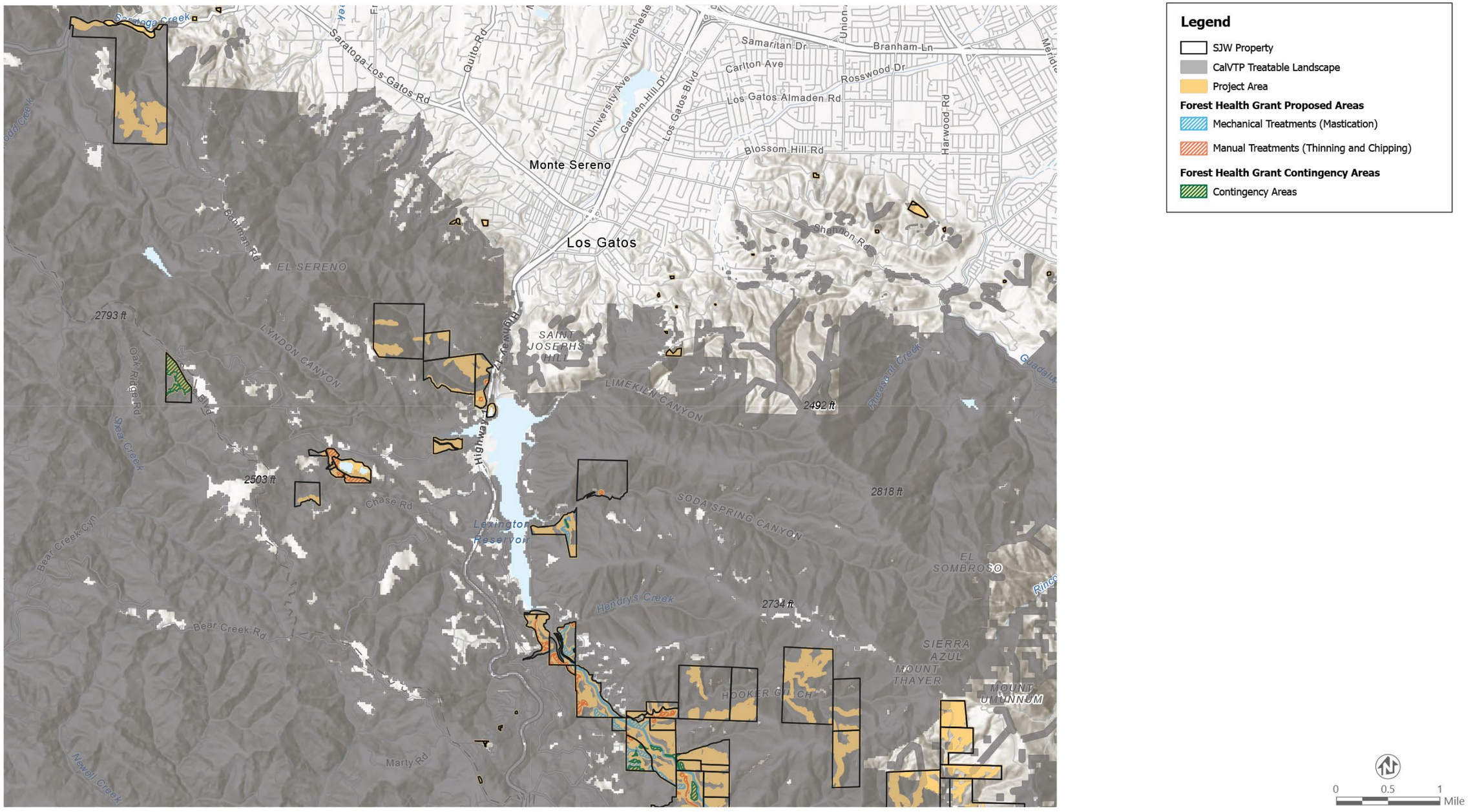
Ecological restoration treatments would be implemented over approximately 1,311.2 acres of the entire 1,947.9-acre project area. This project proposes ecological restoration treatment types to restore ecosystem processes, conditions, and resiliency through the removal of dense understory fuels and invasive species in areas generally outside of the wildland-urban interface (WUI), as defined in the PEIR (CalVTP Final PEIR Volume II Section 2.5.1 page 7 and page 15-17). Ecological restoration treatments are designed to reinvigorate a system where climate change and the restriction of fire for the last 100 years has left these ecosystems less resilient to vegetative alliance changes and more prone to influx of forest pathogens such as sudden oak death (*Phytophthora ramorum*) (SOD). These treatments are intended to restore ecosystem processes, native stand conditions, and increase fire resiliency by reducing burn severities through the removal of unnaturally high levels of dead, dying, or diseased trees and shrubs, dense understory fuels, and invasive species. Ecological restoration treatments would be implemented through mechanical and manual treatment activities and are intended to reduce the risk of stand-replacing fire events, restoring native vegetative species and habitat conditions to improve habitat quality and support natural, low intensity fire regimes.

Thinning of the forest stand through the removal of small diameter live trees (i.e., trees less than or equal to 16 inches DBH) and understory vegetation stimulates the growth of the residual dominant and co-dominant trees (Skovsgaard and Vanclay 2008). In overly dense stands, a significant amount of biomass and potential forest productivity is sequestered in many small trees that comprise the overstocked forest and understory. When these small trees are selectively thinned (i.e., trees less than or equal to 16 inches DBH), sequestered resources are made available to the remaining stands of larger trees, increasing their diameter growth at greater rates, thereby promoting increased carbon storage.

The removal of understory vegetation is intended to mimic a natural disturbance regime that regenerates a more biologically diverse understory with increased availability of sunlight and water. This change in the understory is also expected to increase food availability and complexity to habitat components supporting increased wildlife diversity. The overall goal of ecological restoration is restoration of plant community types to native ecological conditions for long-term forest health, wildlife diversity, carbon sequestration, and sensitive botanical resources.

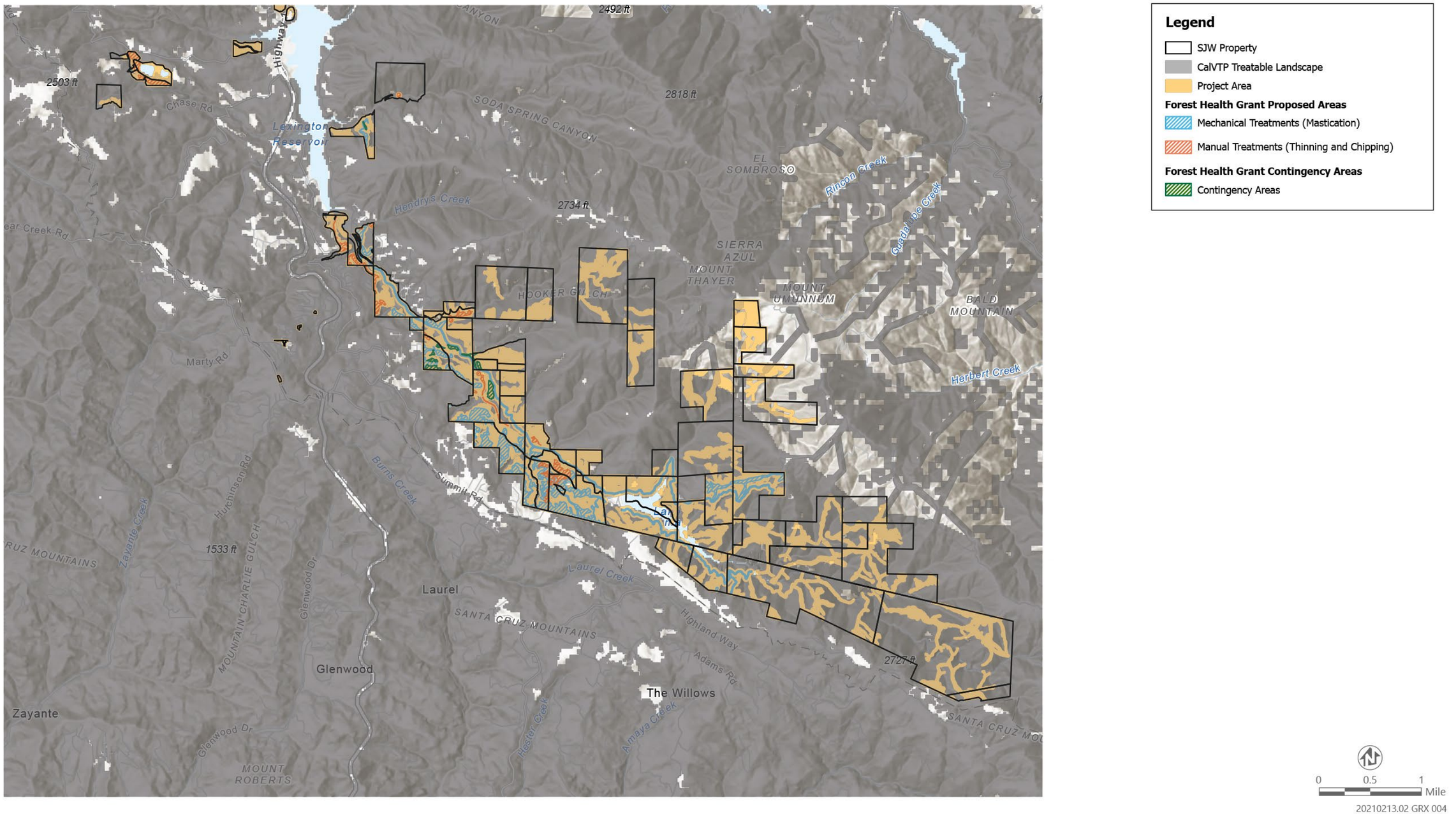
FUEL BREAKS

Fuel break treatments would be implemented over approximately 636.7 acres of the project area to create conditions that slow the spread of wildfire to structures and other natural resources. As defined in the CalVTP PEIR, fuel breaks remove zones of vegetation to support fire suppression efforts and passively interrupt the path of a fire (CalVTP Final PEIR Volume II Section 2.5.1 page 7 and page 11-14).



Source: Image produced and provided by Auten Resources Consulting (ARC) in 2022, adapted by Ascent Environmental in 2022.

Figure 9. San Jose Water (SJW) Project Area, North: Project Treatment Activities



Source: Image produced and provided by Auten Resources Consulting (ARC) in 2022, adapted by Ascent Environmental in 2022.

Figure 10. San Jose Water (SJW) Project Area, South: Project Treatment Activities

Treatments would predominately consist of shaded fuel breaks implemented under the forest canopy and non-shaded fuel breaks in shrub-dominated vegetation types. Shaded fuel breaks support a healthy and fire resilient residual forest stand by retaining the majority of the overstory canopy to maintain shade that will reduce the potential for rapid re-growth of understory vegetation. Non-shaded fuel breaks in shrub habitat are designed to create a mosaic of fuel composition, near key infrastructure or in a naturally dense plant community. Both types of fuel breaks are strategically placed to create the most opportunity to prevent or slow wildfire and increase potential opportunities to manage the interval at which fire returns to the watershed. These fuel break treatment approaches would provide emergency responders an opportunity, weather dependent, to control or contain wildfires through the modification of flammable vegetation.

Treatment Activities

The proposed vegetation treatment activities are mechanical treatment, manual treatment, and targeted, limited spot application of herbicides (i.e., herbicide applied directly, rather than sprayed). Each of these treatment activities is described in more detail below and is consistent with the treatment activities described in CalVTP.

MECHANICAL TREATMENTS

Initial mechanical treatments are proposed for approximately 248.9 acres of the project area including areas within the 40.6 contingency acres (FHG Proposed and Contingency). Mechanical treatments may also be used for the remaining project area per the requirements of the PSA and CalVTP PEIR. Mechanical treatments will occur in areas outside of Watercourse and Lake Protection Zones (WLPZ). As stated in the CalVTP PEIR Section 2.5.2, mechanical treatments may cut, uproot, crush/compact, or chop existing vegetation using masticators and other methods. Mechanical treatments may include mowing, masticating, piling, and additionally include:

- Removing dead, dying and diseased trees and select live trees less than or equal (≤) to 16 inches DBH. Healthy trees selected for retention that are <16 inches DBH will achieve a 10-20 foot spacing and 100-200 trees per acre where feasible;
  - Where stands are comprised solely of trees < 16 inches DBH, these stands will be spaced approximately 10-20 feet apart to develop and maintain shaded fuel breaks. Healthy trees ≤16 inches dbh will be favored for retention over diseased trees ≤16 inches dbh to meet the spacing goal.
- Cutting and chipping of understory ladder fuels and shrubs, leaving root systems intact for resprouting;
  - Where cutting and mastication of vegetation in shrub-dominated plant communities and grasslands would occur, treatments would leave root systems intact for resprouting to achieve approximately 35 percent retention within a stand of shrubs within a specified treatment polygon, unless greater retention is required pursuant to SPRs or MMs.
- Chipping and mastication of dead and downed trees less than 16 inches DBH;
  - When masticating, operators will minimize disturbance to down wood greater than 12 inches in diameter where feasible, only moving large pieces of woody debris when

necessary to reduce fire behavior or gain access to larger portions of treatment areas, with a per acre retention target of 1–4 downed logs 15 feet in length and greater than or equal to 12 inches in diameter per acre.

- Removing trees greater than 16 inches DBH if they are a public safety hazard, dead or dying, irreversibly diseased, substantially damaged, or an invasive exotic;
  - Where vegetation outside of the drip line of retained trees and shrubs would be cut and masticated, root systems will be left intact for resprouting to achieve a horizontal crown separation of approximately 50-100 feet, with approximately 10 percent retention per acre, depending on slope or proximity to key infrastructure assets.
- Pruning of trees to a height of 6-15 feet but never removing more than 50 percent of the crown;
  - When treating live understory vegetation, if feasible, masticating heads will be kept out of the duff layer and will conduct treatments approximately 6 inches above the ground. Thereby, minimizing direct disturbance to subsurface soil layers, allowing intact root systems to resprout;
- Spreading of residual masticated material uniformly and not exceeding a depth of approximately six inches with an average of approximately three inches;
- Track chippers will be restricted to manual treatment units where slopes do not exceed 35 percent, and
- Cutting stumps, no higher than 6 inches above the ground and maintaining a smooth, flat appearance.

To maintain habitat function for special-status wildlife, the following features would be retained within all treatment areas:

- Healthy, native hardwoods greater than 16 inches dbh;
- Healthy, native conifers greater than 16 inches dbh;
- Downed woody debris in strategic locations to maintain forest floor complexity while reducing fuel connectivity;
- California buckeye (*Aesculus californica*), California nutmeg (*Torreya californica*), California Big leaf-maple (*Acer macrophyllum)*, western sycamore (*Platanus racemose*), box elder (*Acer negundo var. californicum*), and all hydrophytic plant species (e.g., sedges [*Carex spp*.], rushes [*Juncus spp*.], western azalea [*Rhododendron occidentale*], red elderberry [*Sambucus racemosa*] and blue elderberry [*Sambucus cerulea*], and ferns [Pteridophyta]);
  - California hazelnut (*Corylus cornuta*) may be treated but would be spaced approximately 25 – 100 feet depending on frequency per acre, steepness of slope related to exacerbation of fire behavior, or proximity to key infrastructure and assets.
- Micro stands of untreated oak trees with a radius of approximately 25 feet (50-foot diameter); and
  - Micro stands of oaks should be spaced approximately 75 -100 feet apart depending on the steepness of slope related to exacerbation of fire behavior or proximity to key infrastructure and assets.
  - In areas specified for retention of vegetation outside of riparian habitat, maintain associated herbaceous vegetative understory components with an overall goal of maintaining a typical minimum of approximately 5-10% herbaceous understory

vegetation per acre unless removal is warranted with respect to homes, community protection, or other key infrastructure or assets including roads and staging areas.

- Chapparal vegetation at approximately 35 percent cover in any chaparral-dominated area within a treatment polygon unless greater retention is required pursuant to SPRs or MMs.

Up to 12 workers would be needed to implement a mechanical treatment.

MANUAL TREATMENTS

Initial manual treatments (FHG Proposed and Contingency) are proposed for approximately 61.8 acres of the project area and a portion of the 40.6-acre contingency areas. Manual treatments may also be used for the remaining project area per the requirements of the PSA and CalVTP PEIR. Manual treatments consist of the use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous or woody species. Manual activities would generally include similar treatment specifications as mechanical treatments (may operate on slopes greater than 50 percent as needed) but completed with hand crews and include:

- Thinning trees with chainsaws, loppers, or pruners;
- Cutting undesired competing brush species above ground level to favor desired species and spacing; and
- Pulling or digging out root systems of undesired plants to prevent sprouting and regrowth.
- Manual treatments would be implemented predominantly in Class III Equipment Exclusion Zones (EEZ) and where slopes are greater than 35 percent. Manual treatments within Class I and II WLPZ will follow canopy retention requirements of the CalVTP PEIR and would be limited to strategic locations where necessary to maintain connectivity of shaded fuel breaks. Ground disturbance during manual treatments is typically less than that of mechanical treatments, allowing for treatments to be carried out in sensitive habitats, wet areas, and riparian corridors or areas where mechanical treatments are not feasible or appropriate. Up to 20 workers would be needed to implement a manual treatment.

HERBICIDE

Herbicide treatments are proposed for approximately 11.4 acres of eucalyptus forest within the 1,947.9-acre project area and on select specimens of invasive trees such as acacia or other undesirable invasive exotic trees in the project area. Only direct application to freshly cut stumps on the cambium layer of the tree would occur. Two growth inhibitor chemicals are proposed for use and are within the scope of the CalVTP Final PEIR (Volume II Section 3.10.3 Table 3.10-1, page 16-17): Triclopyr (Garlon 3 or 4) and Glyphosate (Round Up). Per the CalVTP, herbicide treatments will be limited to spot application and would comply with all Environmental Protection Agency (EPA) label directions. SJW would not apply herbicides within any WLPZ. As stated in the CalVTP PEIR (Volume II Section 3.10.3 Table 3.10-1, page 16-17), the herbicides proposed for use pose low levels of toxicity to humans, although some can result in skin and eye irritation or can be slightly toxic if prolonged exposure occurs. Up to 3 workers would be needed to implement an herbicide treatment.

BIOMASS PROCESSING

Understory debris would be masticated or chipped on-site within the treated areas during dry periods of the year to dispose of accumulated biomass, pursuant to the standards defined in the PEIR (CalVTP Final PEIR Volume II Section 2.5.2, 22-24). The biomass generated from CalVTP vegetation treatments would primarily be disposed by the following measures:

- lopping and scattering within treatment boundaries;
- shipping chips to a biomass processing facility;
- use of curtain burners and application of biochar; or
- chips distributed onto the ground as mulch.

Approximately three air curtain burners would be used to dispose biomass during implementation of the project. The size would vary, the largest being the size of a storage shipping container (approximately 40 feet (ft) by 11 ft by 9 ft), and the smallest being approximately half that size (approximately 20 ft by 7 ft by 5 ft) The size of the air curtain burner is directly related to the rate at which biomass can be processed (i.e., larger options can process 11-13 tons/hour and smaller versions can process approximately ½-1 ton/hour). Air curtain burners would be located in large, clear openings, with a minimum 100 feet of clearance of all vegetation surrounding the burners (e.g., skid trails, roads, landings) on bare mineral soil or pavement to avoid fire risk. Placement would be located such that emergency vehicles or a fire engine would have unobstructed access in case of an emergency. corporation/maintenance yard located approximately 0.5 mile Northwest from the Austrian Dam has been identified as a suitable location for air curtain burners.

Produced biochar would either be distributed on SJW land or donated for offsite use. Spreading of biochar on SJW lands would occur on areas with slopes of less than 30 percent, using a skid steer or dozer, to a depth of up to six inches over 10-20 acres. Offsite uses would most likely be on local organic farm operations within Santa Cruz County, though could be applied more broadly on conventional operations. This material would be incorporated into the soil. Biochar would be applied at the recommended rate of no more than 10 tons/acre.

9. **Treatment Types** *[see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in Description of Project*]
   - ☐ Wildland-Urban Interface Fuel Reduction
   - ☒ Fuel Break
   - ☒ Ecological Restoration

10. **Treatment Activities** [*see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in Description of Project*]
   - ☐ Prescribed (Broadcast) Burning, **xx** acres
   - ☐ Prescribed (Pile) Burning, **xx** acres
   - ☒ Mechanical Treatment, 248.9 acres
   - ☒ Manual Treatment, 61.8 acres
   - ☐ Prescribed Herbivory, **xx** acres
   - ☒ Herbicide Application, 11.4 acres

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

12. **Geographic Scope** [Refer to [to be determined] for a map of the CalVTP treatable landscape, check one box]
    - ☐ The treatment site is entirely within the CalVTP treatable landscape
    - ☒ The treatment site is NOT entirely within the CalVTP treatable landscape

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

The project area encompasses a total of approximately 1,947.9 acres in southwest Santa Clara County on the east and west sides of California State Route (SR) 17. The project is located entirely on lands owned by San Jose Water, a privately owned water company in Los Gatos, California.

The project area is primarily steep terrain with dense vegetation, rocky outcrops and some land directly west of the project area is cultivated. Lake Elsman and Lexington Reservoir are surrounded by the project area. The region surrounding the project area (i.e., outside of San Jose Water lands), offers recreation options for mountain bikers, hikers, fishers, and off-highway vehicles. There are several small communities adjacent to the project area off Summit Road. The project area is southeast of SR 35 and SR 9 junction. Most of the project area falls on the east side of SR 17 and extends south to the Summit Road and Loma Prieta Road junction.

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

None

15. **Native American Consultation**. *For treatment projects that are within the scope of this PEIR, AB 52 consultation has been completed. The Board of Forestry and Fire Protection and CAL FIRE completed consultation pursuant to Public Resources Code section 21080.3.1 in preparation of the PEIR.*

Pursuant to CalVTP SPR CUL-2, Native American tribal contacts in Santa Clara County were contacted on July 26, 2022. On July 29, 2022 the Tamien Nation replied; the Tribe met with SJW and the project registered professional foresters. The Tribe was supportive of the project and stated they will check their records for any possible known sites. No other Native American tribes responded within the 30-day window within which a response was requested.

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

Maintenance treatments are estimated to occur approximately every 3-5 years but may occur as needed, depending on vegetative regrowth and the availability of funding and resources to conduct treatment. Following initial treatment, site conditions are expected to resemble a parklike setting with a clear, open understory that would promote a healthier, more vigorous forest. Open understories will create a mosaic of fuel continuity that would support wildlife habitats and the regeneration of native species. Maintenance intervals will be dependent on the re-establishment rate of the understory species and would be triggered by dense, continuous understory and ladder fuels. Maintenance treatments would be conducted using the same treatments described above for initial treatments (i.e., mechanical methods, manual methods, limited herbicide application).

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

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

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

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

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

    Explanation: N/A

DETERMINATION

On the basis of this initial evaluation:

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

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

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

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

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

Signature: DocuSigned by: John Melvin 6569EF653A04422... Date: 1/31/2023

Printed Name: John Melvin Title: Assistant Deputy Director, Resource Management

CALIFORNIA DEPARTMENT OF
FORESTRY AND FIRE PROTECTION (CAL FIRE)

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the life span of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR.

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic found at the following website: https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-programmatic-eir/.

3. Once the CEQA lead or responsible agency has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:

– **Less Than Significant (LTS)** - An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.

– **Less Than Significant *with* Mitigation (LTSM)** - An impact was identified within the PEIR which was viewed in totality as potentially significant and/or significantly unavoidable and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.

– **Potential Significant (PS)** - An impact treated as if it were a significant impact. “Potentially” is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.

– **Potentially Significant and Unavoidable (PSU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. “Potentially” is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR

– **Significantly Unavoidable (SU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.

– Not applicable (N/A)

If the impact is equal to or less than the impact identified in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.

4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.

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

6. Standard Project Requirements (SPR) and Mitigations Measures (MM).

- **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
- **Implementing Entity**. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include a project manager, a technical specialist (e.g., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement. For this project, the implementing entity will be SJW.
- **Verifying/Monitoring Entity**. The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity and is typically the CEQA lead or responsible agency. For the purposes of the FHG, the verifying/monitoring entity is CAL FIRE.

NOTE: The cited SPRs and MMs are summarized to manage the template's size. Refer to the approved CalVTP language attached (Attachment A) for the full list of requirements.

AESTHETICS AND VISUAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	Impact AES-1, 3.2	LTS	SPR AES- 2 SPR AQ- 2, 3 SPR REC-1	Yes	LTS	☒

The project area would be visible from State Route (SR) 17, SR 35, which are both designated as eligible scenic highways (Caltrans 2022). The proposed project would implement manual treatments, mechanical treatments, and limited herbicide application (in limited amounts, ~11.4 acres of cut stump treatments on invasive exotic eucalyptus trees). Although the presence of large mechanical equipment could contrast with the natural environment within a viewshed if visible (such as in the grass fuel type or adjacent to a roadway), the treatment and its visibility would be temporary and would not dominate a view or block any views from scenic vistas or state scenic highways. It also would not substantially degrade the existing visual character or quality of an area given that the activity would be limited in geographic extent. Furthermore, manual and mechanical treatments currently occur within the treatable landscape under existing vegetation treatment programs; the increase in pace and scale of treatments under the proposed CalVTP would not introduce a new feature on the landscape. While the overall number of acres treated per year would increase, CAL FIRE would incorporate SPR AES-2 during implementation of vegetation treatments, which would avoid the staging of equipment within a viewshed thereby reducing the visual presence of treatment-related materials and equipment. In regard to herbicide application, activities would often occur within vegetated areas and thus would be largely screened from view. For these reasons, herbicide application itself would not dominate a view or block any views from a scenic vista or a state scenic highway, nor would it substantially degrade the existing visual character and quality of the treatable landscape. Therefore, treatment activities would not result in a substantial degradation of a scenic vista or of visual character and quality, or substantially damage scenic resources within a state scenic highway. The potential for the proposed treatments activities to result in short-term substantial degradation of a scenic vista or visual character or quality of public views, or damage to scenic resources within a State Scenic Highway was examined in the PEIR. 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 are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing scenic resources associated with the project area are substantially similar

within and outside of the treatable landscape analyzed in the PEIR; therefore, the short-term aesthetic impact is substantially similar to that described in the PEIR. The use of air curtain burners would cause a similar aesthetic change as other equipment used on site because it would appear as large metal equipment staged for temporary periods of time. The use of air curtain burners would generate smoke, albeit less than for prescribed burning, which was analyzed in the PEIR. The SPR applicable to the proposed project is SPR AES-2. 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 AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	Impact AES-2, 3.2	LTS	SPR AES- 1 SPR AES- 3 SPR AD- 4 SPR REC- 1	Yes	LTS	☒

Initial and maintenance treatments would include shaded fuel breaks and ecological restoration treatment types. The project area is located on private lands, which are not accessible to the public and no public recreational trails exist within the project area or its viewshed. However, treatment activities would be visible from public roadways located near the project area including SR 17 and SR 35, which are both designated as eligible scenic highways (Caltrans 2022). Ecological restoration would retain most visually dominant vegetation, would likely be a barely perceptible change for viewers from a scenic vista or a state scenic highway, and would not substantially degrade the visual character and quality of a site. In regard to shaded fuel breaks, a portion of the existing vegetation would be cleared, and many mid-range to large diameter trees would remain within shaded fuel breaks. Thus, vividness, intactness, and unity of views would likely remain high and it is unlikely that they would substantially affect views from a scenic vista or from a state scenic highway. Furthermore, SPR AES-1 and SPR AES-3 would be incorporated into vegetation treatment projects (including fuel breaks), as feasible, to break up or screen linear edges of a clearing, achieve a natural transitional appearance, and screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. Therefore, establishment of shaded fuel breaks would not result in a long-term, substantial degradation of a scenic vista, substantially damage resources in a state scenic highway, or degrade the existing visual character and quality of a site. 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 types are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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 visual character is substantially similar within and outside of the treatable landscape; therefore, the long-term aesthetic impact is substantially similar to that described in the PEIR. The use of air curtain burners would be temporary and not result in long-term effects to aesthetic resources. The SPRs applicable to the proposed project are SPR AES-2 and AES-3. The proposed treatments would be consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	Impact AES-3, 3.2	SU	MM AES- 3	Yes	SU	☒

Initial and maintenance treatments would include nonshaded fuel breaks. The potential for these treatment types to result in long-term degradation of the visual character of an area was examined in the PEIR. The project is located on private lands that are visible from SR 17 and SR 35, which are both designated as eligible state scenic highways (Caltrans 2022). Non-shaded fuel breaks would be established in strategic locations, typically where there is a natural change in vegetation type, to reduce fire spread to structures and natural resources and to provide access for fire suppression efforts. Because of the strategic nature of non-shaded fuel break siting, it may be infeasible to relocate a non-shaded fuel break to avoid public visibility. Therefore, there could be degradation of a scenic vista or visual character or quality of public views, or damage to scenic resources in a state scenic highway. 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 project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing scenic resources associated with the project area are substantially similar within and outside of the treatable landscape analyzed in the PEIR; therefore, the long-term aesthetic impact is substantially similar to that described in the PEIR. MM AES-3 is applicable to the proposed 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.

Other Impacts to Aesthetics: Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has evaluated and considered site specific characteristics to determine that the project treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.2.1, “Environmental Setting,” and Section 3.2.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the project area constitutes a change to the geographic extent presented in the PEIR. However, the existing scenic resources associated with the project area are substantial similar within and outside treatable landscape analyzed in the PEIR. The use of air curtain burners would generate smoke, albeit less than for prescribed burning, which was analyzed in the PEIR. 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 and the use of air curtain burners would not give rise to any new significant impact. Therefore, no new impact related to aesthetics and visual resources would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AES-1 Vegetation Thinning and Edge Feathering: This SPR only applies to mechanical and manual treatment activities within all treatment types.	Yes	SJW Prior-During	CAL FIRE

PRIOR – Pre-field work to determine treatment types and boundaries will consider topographical features with the intent to create irregular vegetation densities and treatment area size to mimic natural conditions.

DURING – If there are areas within the mechanical treatment areas that cannot be completed with the use of equipment due to equipment limitations, they will be treated with manual treatment methods.

SPR AES-2 Avoid Staging within Viewsheds: This SPR applies to all treatment activities and all treatment types.	Yes	SJW Prior-During	CAL FIRE

The project area is on private land and is not visible from scenic vistas. Treatment activities may be visible from State Route 17, and therefore equipment staging areas will be located away from these public roadways. There are no public parks, trails, or recreational areas within the project area.

SPR AES-3 Provide Vegetation Screening: This SPR applies to all treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

This project is located on private property and treatments will predominantly occur outside of public viewsheds. Contractors will provide vegetation screening where necessary in areas visible to the public, mainly along State Route 17.

MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks	Yes	SJW Prior-During	CAL FIRE

Mitigation Measure AES-3 will be implemented for all non-shaded fuel breaks. Visual reconnaissance surveys will be conducted prior to implementation to identify the locations from where the non-shaded fuel breaks would be visible. SJW will identify feasible changes in the treatment design to reduce impacts to public views of non-shaded fuel breaks. Vegetation adjacent to the highways may be feathered to break up the linear edges of the fuel break and strategically preserve vegetation along the edge of the fuel break.

AGRICULTURE AND FOREST RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AG-1: Result Directly in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	Impact AG-1, 3.3	LTS	N/A	Yes	LTS	☒

The dominant vegetation community in the project area is forest and includes species such as coastal redwood, Douglas Fir, pine, cypress, alder, big leaf maple, California bay, oaks, and other deciduous and evergreen hardwoods (San Mateo County RCD 2021). These forests have generally closed canopies with moderate to dense understory fuels. Shrub vegetation communities are also present especially in the southeast portion of the project area as well as northwest of the Lexington Reservoir. The shrub fuel types to be treated consist predominately of native shrub and chaparral species, such as coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*), and manzanita (*Arctostaphylos* spp.). However, invasive species, such as French broom (*Genista monspessulana*), acacia (*Acacia* spp.), and eucalyptus (*Eucalyptus* spp.), have been documented in treatment areas. The project area is considered “forest land” as defined in Public Resources Code (PRC) Section 12220(g), which is land that can support 10 percent native tree cover of any species under natural conditions.

Vegetation treatment activities implemented within the project area would include mechanical, manual, and limited herbicide to conduct ecological restoration and fuel break treatment types. Mechanical treatments would remove dead or dying trees and select healthy hardwood with DBH less than or equal to 16 inches and spaced 10-20 feet apart where feasible to maintain habitat continuity in the treatment area. Where there are only stands made up of trees less than 16 inches DBH in the project area, these stands of smaller trees would be managed to be spaced approximately 10-20 feet apart to develop and maintain shaded fuel breaks. Understory ladder fuels and shrubs will be cut and chipped while leaving root systems intact for resprouting in order to achieve approximately 35 percent retention or greater within a stand of shrubs within a specified treatment polygon. Trees may also be pruned to a height of 6-15 feet but never more than 50 percent of the crown. Thinning and understory removal is intended to promote more growth for the remaining trees to become larger and to increase biodiversity in the understory leading to healthier, more resilient forest lands in the project area.

The potential for these treatment types and treatment activities to result in the loss of forest land or conversion of forest land to non-forest use was examined in the PEIR. For those areas where the existing native tree cover exceeds 10 percent, consistent with the PEIR, the vegetation remaining after treatments in those areas would continue to meet the definition of forest land as

defined in PRC Section 12220(g), which defines “forest land” as land that can support 10 percent native tree cover of any species under natural conditions.

The inclusion of land in the project 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 composition of forested land as defined in PRC Section 12220(g) is essentially the same within and outside the treatable landscape; therefore, the impact to forest land is substantially the same as described in the PEIR. The use of air curtain burners would not affect forested lands because they would be located on bare mineral soil or pavement, outside of vegetated areas. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.3.1, “Environmental Setting,” and Section 3.3.2, “Regulatory Setting,” in Volume II of the Final PEIR). Including land from outside the CalVTP treatable landscape in the project area 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 are present, and the inclusion of areas outside of the CalVTP treatable landscape and the use of air curtain burners would not give rise 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.

AIR QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	Impact AQ-1, 3.4	PSU	SPR AD- 4 SPR AQ-1, 2, 3, 4, 5, 6 MM AQ- 1	Yes	SU	☒

Use of vehicles and mechanical equipment during treatments would result in emissions of criteria pollutants that could exceed California ambient air quality standard or national ambient air quality standard thresholds. The proposed project falls within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) (BAAQMD 2022). The potential for emissions of criteria pollutants to exceed California Ambient Air Quality Standards or National Ambient Air Quality Standards thresholds was examined in the PEIR and found to be significant and unavoidable after the application of all feasible mitigation measures because of uncertainties in the degree of emissions reduction that could occur during implementation of later treatment projects. Emissions of criteria air pollutants related to the proposed treatment would be also significant and are within the scope of the impacts addressed in the PEIR because the proposed activities, as well as the associated equipment and duration of use, are consistent with those analyzed in the PEIR.

Air curtain burners would be used as one of several methods to dispose of biomass. Smoke generated by the combustion of vegetation during operation of curtain burners may occur, but at a much lesser extent than would occur for pile burning. VCFPD proposes the use of air curtain burning to process biomass, pursuant to Mitigation Measure GHG-2. Evaluation of criteria air pollutant emissions from these technologies conducted by Ascent (2022) indicates that smoke and criteria air pollutant emissions can be substantially reduced, compared to open pile burning. Use of an air curtain burner substantially reduces ROG and PM emissions by approximately 96 percent when compared to pile burning. For NO_X, air curtains are estimated to reduce NO_X emissions by at least 73 percent. (Ascent 2022). Because curtain burners are a method similar to pile burning, this impact is addressed within the scope of the PEIR as a similar type of activities; however, smoke emissions would be substantially lower than described for burns in the PEIR. Despite the substantial reduction in criteria air pollutant emissions afforded by use of these biomass processing technologies, impact AQ-1 must still be recognized as potentially significant and unavoidable because of uncertainties in the extent of their use.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the boundary of the project area that are within and outside of the treatable landscape are located within the same air basin and contain the same air quality conditions. Additionally, the area outside of the treatable

landscape, 172.9 acres, is not substantial in comparison to expected annual statewide treatment area of 250,000 acres; thus, the increase in the use of vehicles and mechanical equipment, and related emissions, would not be substantially greater than that analyzed in the PEIR (i.e., within the treatable landscape). Therefore, the air quality impact is not substantially greater than described in the PEIR. This impact would remain significant and unavoidable as explained in the PEIR, but for the reasons explained above, would not constitute a new or substantially more severe significant impact. The SPR applicable to the proposed project is SPR AQ-4. MM AQ-1 is applicable to the proposed project.

Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4 SPR NOI- 5	Yes	LTS	☒

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 was examined in the PEIR. The proposed treatments would occur over a short duration and would not occur near the same people for an extended period of time. 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.

The inclusion of land in the project 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 sensitive receptors (i.e., exposure potential) present in the areas outside the treatable landscape are the same as those within the treatable landscape. Additionally, the area outside of the treatable landscape, 172.9 acres, is not substantial in comparison to expected annual statewide treatment area of 250,000 acres; thus, the increase in the use of vehicles and mechanical equipment, and related emissions, would not be substantially greater than that analyzed in the PEIR (i.e., within the treatable landscape). The use of curtain burners would require some use of diesel for the generator that powers the fan; however, it would be minimal as compared to other equipment used for vegetation treatment and would not result in greater equipment-related emissions than described in the PEIR. Therefore, the air quality impact is not substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR HAZ-1, NOI-4 and NOI-5. 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: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	LTS	SPR AQ-4, 5	Yes	LTS	☒

Asbestos is the common name for a group of naturally occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally occurring asbestos (NOA) was identified as a TAC in 1986 by CARB. NOA is located in many parts of California, including within the project site, and is commonly associated with ultramafic rocks and serpentinite, according to a special publication published by the California Geological Survey (Churchill and Hill 2000). Treatment activities implemented

under the CalVTP could involve ground disturbing activities such as vehicle travel on unpaved roads and use of tractors in areas where NOA is present, which may result in NOA becoming airborne. The potential for exposure of NOA-containing fugitive dust emissions during treatment activities was examined in the PEIR. Exposure of NOA-containing fugitive dust from the proposed treatment is 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 the proposed treatments and extent of ground disturbance are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. Areas of NOA are known to occur within the project area generally north of Summit Road and east of SR 17. Data of known NOA occurrence within the project area is not provided at a scale for which it can definitively be determined if NOA is located outside of the CalVTP treatable landscape. However, the area outside of the treatable landscape, 172.9 acres, is not substantial in comparison to expected annual statewide treatment area of 250,000 acres, and only a small portion of the 172.9 acres may contain NOA; thus, the increase in ground-disturbing activities that could result in exposure of NOA-containing fugitive dust would not be substantially greater than that analyzed in the PEIR (i.e., within the treatable landscape). Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance that could release NOA. Therefore, the air quality impact is not substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPRs AQ-4 and AQ-5. 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-4: Expose People to Toxic Air Contaminants (TACs) Emitted by Prescribed Burns and Related Health Risk	Impact AQ-4, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6	Yes	SU	☒

The potential exposure of people to toxic air contaminants during pile and broadcast burning was examined in the PEIR and found to be significant and unavoidable after the application of all feasible mitigation measures because unpredictable changes in weather can occur during prescribed burns resulting in short-term exposure of people to concentrations of toxic air contaminants and associated levels of acute health risk with a Hazard Index greater than 1.0. The proposed project does not include pile or broadcast burning; however, it does include air curtain burning, which would emit smoke containing TACs. Toxic air contaminants resulting from the combustion of biomass are generally organic in nature and are, therefore, a subset of ROG emissions. Based on evaluation conducted by Ascent (2022), use of air curtain burning would reduce ROG emissions by 96 percent when compared to pile burning of equivalent areas. Therefore, the exposure of persons to TACs and related health risks would likely be substantially lower with the use of air curtain burning as compared with pile burning. The use of air curtain burners would generate substantially fewer TACs than pile burning, which was analyzed in the PEIR. Therefore, the potential for exposure to toxic air contaminants attributable to the proposed project is also within the scope of impacts 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 air quality conditions present and

air basins 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 impact would remain significant and unavoidable as explained in the PEIR, but for the reasons explained above, would not constitute a new or substantially more severe significant impact.

Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	Impact AQ-5, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4, 5	Yes	LTS	☒

The use of vehicles and mechanical equipment during initial and maintenance treatments could expose human receptors to the objectional odors from diesel exhaust. The potential to expose human receptors to diesel exhaust was analyzed in the PEIR. The release of objectional odors from diesel exhaust during proposed treatments is within the scope of the impacts analyzed in the PEIR because the proposed treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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 sensitive receptors present in the areas outside the treatable landscape are the same as those within the treatable landscape. Additionally, the area outside of the treatable landscape, 172.9 acres, is not substantial in comparison to expected annual statewide treatment area of 250,000 acres; thus, the increase in the use of vehicles and mechanical equipment, and related emissions, would not be substantially greater than that analyzed in the PEIR (i.e., within the treatable landscape). The use of air curtain burners would require some use of diesel for the generator that powers the fan; however, it would be minimal as compared to other equipment used for vegetation treatment and would not result in substantially greater odor emissions from diesel than described in the PEIR. Therefore, the air quality impact is substantially similar to that described in the PEIR. The SPRs applicable to the proposed project are SPR HAZ-1, NOI-4 and NOI-5. 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: Expose People to Objectionable Odors from Smoke During Prescribed Burning	Impact AQ-6, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6	Yes	SU	☒

The potential exposure of people to objectionable odors from smoke generated during prescribed burning, including pile burning, was examined in the PEIR and found to be significant and unavoidable after the application of all feasible mitigation measures because short-term exposure to odorous smoke emissions from unpredictable weather changes could occur. The proposed project does not include pile or broadcast burning; however, it does include air curtain burning, which would emit odorous smoke. Because air curtain burners are method similar to pile burning, this impact is addressed within the scope of the PEIR as a similar type of activities; however, odor exposure would be substantially lower than described for burns in the PEIR because the air curtain would contain or otherwise filter smoke.

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 sensitive receptors 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 impact would remain significant and unavoidable as explained in the PEIR, but for the reasons explained above, would not constitute a new or substantially more severe significant impact.

Other Impacts to Air Quality: Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities evaluated in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined that they are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.4.1, “Regulatory Setting,” and Section 3.4.2, “Environmental Setting,” in Volume II of the Final PEIR). Including land from outside the CalVTP treatable landscape in the project area 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 air quality that are present in the areas outside the treatable landscape are the same as those within the treatable landscape; 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. The use of air curtain burners would generate smoke, albeit less than for prescribed burning, which was analyzed in the PEIR. Therefore, no new impact related to air quality would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AQ-1 Comply with Air Quality Regulations: This SPR applies to all treatment activities and all treatment types.	Yes	SJW Prior-During	CAL FIRE

SJW will comply with applicable requirements of the BAAQMD; however, no permits or other approvals from BAAQMD are required to implement the proposed treatments.

SPR AQ-2 Submit Smoke Management Plan: This SPR applies only to prescribed burning treatment activities and all treatment types.	No	SJW N/A	CAL FIRE

SPR AQ-2 does not apply to the proposed project because prescribed burning would not be used within the project area.

SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types**.**	No	SJW N/A	CAL FIRE

SPR AQ-3 does not apply to the proposed project because prescribed burning would not be used within the project area.

SPR AQ-4 Minimize Dust: This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

To minimize dust during treatment activities, the measures listed in under SPR AQ-4 in Attachment A will be implemented during treatments.

SPR AQ-5 Avoid Naturally Occurring Asbestos: This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

SPR AQ-5 requires that areas containing naturally occurring asbestos will be avoided.

SPR AQ-6: Prescribed Burn Safety Procedures: Prescribed burns will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP).	No	SJW N/A	CAL FIRE

SPR AQ-6 does not apply to the proposed project because prescribed burning would not be used within the project area.

MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.	Yes	SJW During	CAL FIRE

The components of Mitigation Measure AQ-1 that have been determined to be feasible and would be implemented to reduce emissions include use of gasoline-powered equipment rather than diesel-powered equipment, encouraging carpooling to the project area, and using Best Available Control Technology for emission reductions of NO_X and PM on equipment. Equipment meeting Tier 4 emission standards and the use of renewable diesel fuel would be implemented to the extent feasible.

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, 3.5	LTS	SPR CUL-1, 7, 8	Yes	LTS	☒

Proposed treatment activities include mechanical treatments, which could damage historical resources. The results of the records search at the Northwest Information Center (NWIC) identified five built environment features; however, the eligibility of these resources for listing in the California Register of Historical Resources (CRHR) has not been evaluated. Therefore, it is not known whether these sites are considered resources under CEQA. Nevertheless, if structures (i.e., buildings, bridges, roadways) over 50 years old that have not been recorded or evaluated for historical significance are present in the project area, they will be avoided. The potential for these treatment activities to result in disturbance, damage, or destruction of built-environment structures that have not yet been evaluated for historical significance was examined in the PEIR. This impact is within the scope of the PEIR because treatment activities and the intensity of ground disturbance of the treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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 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. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance that could affect cultural resources. The SPRs applicable to the proposed project are SPR CUL-1, CUL-7, and CUL-8. 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 CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	Impact CUL-2, 3.5	SU	SPR CUL-2, 3, 4, 5, 8 MM CUL- 2	Yes	SU	☒

Vegetation treatment would include mechanical treatments using heavy equipment that could churn up the surface of the ground during treatment as vegetation is removed; this may result in damage to known or previously unknown archaeological resources. The NWIC records search revealed five built features and nine archaeological sites; however, the eligibility of these resources for

listing in the CRHR has not been evaluated. Therefore, it is not known whether these sites are considered resources under CEQA. The potential for these treatment activities to result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources during vegetation treatment was examined in the PEIR. This impact was identified as significant and unavoidable in the PEIR because of the large geographic extent of the treatable landscape and the possibility that there could be some rare instances where inadvertent damage of unknown resources may be extensive. Because the project could result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources, it would contribute to the environmental significance conclusion in the PEIR; therefore, for purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable.

The inclusion of land in the project 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 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 is within the scope of the PEIR because treatment activities and intensity of ground disturbance of the treatment project are consistent with those analyzed in the PEIR. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance that could affect cultural resources. The SPRs applicable to the proposed project are SPR CUL-2, CUL-3, CUL-4, CUL-5, and CUL-8. Mitigation Measure CUL-2 is also applicable to the proposed 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.

Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, 3.5	LTS	SPR CUL-1, 2, 3, 4, 5, 6, 8	Yes	LTS	☒

On July 26, 2022, SJW and CAL FIRE contacted Native American tribes in Santa Clara County listed in NAHC and identified by CAL FIRE. On July 29, 2022 the Tamien Nation replied; the Tribe met with SJW and its consulting registered professional foresters. The Tribe was supportive of the project and stated they will check their records for any known sites. Continued communications with the Tribe through August and September 2022 did not identify any known sites or requested changes to the SPRs. No other Native American tribes responded within the 30-day window within which a response was requested. The potential for the proposed treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource during implementation of vegetation treatment was examined in the PEIR. This impact is within the scope of the PEIR because the intensity of ground disturbance of the treatment project is consistent with that analyzed in the PEIR. As explained in the PEIR, while tribal cultural resources may be identified within the treatable landscape during development of later treatment projects, implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource.

The inclusion of land in the project 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 tribal cultural affiliations 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. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance that could affect tribal cultural resources. The SPRs applicable to the proposed project are SPR CUL-1, CUL-2, CUL-3, CUL-4, CUL-5, CUL-6, and CUL-8. 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 CUL-4: Disturb Human Remains	Impact CUL-4, 3.5	LTS	N/A	Yes	LTS	☒

Vegetation treatment activities would include mechanical treatments using heavy equipment; these treatments may use skid steers, excavators, dozers, and masticators, which could uncover human remains. The potential for treatment activities to uncover human remains was examined in the PEIR. This impact is within the scope of the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. Additionally, consistent with the PEIR, the project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097 in the event of a discovery.

The inclusion of land in the project 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 uncovering human remains during implementation of the treatment project is essentially the same within and outside the treatable landscape and treatment activities; therefore, the impact related to disturbance of human remains is also the same, as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance that could disturb human remains. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts to Archeological, Historical, and Tribal Cultural Resources: Would the project result in other impacts to archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.5.1, “Environmental Setting,” and Section 3.5.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the project area 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 archaeological, historical, 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. The use of air curtain burners would not cause impacts in addition to those discussed

in the PEIR. No changed circumstances are present, therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR CUL-1 Conduct Record Search: For treatments led by CAL FIRE, an archaeological and historical resource record search will be conducted per the "Archaeological Review Procedures for CAL FIRE Projects" (current edition dated 2010). This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

A records search of the project area was performed by the NWIC. Results were returned on June 9, 2022 (File No. 21-2020). The results identified five built environment features (dams and road segments) and nine archaeological sites. The archaeological sites consist of one indigenous artifact (bedrock mortar) and eight historic-era sites (railroad grade, fence line remains, water conveyance systems, residential debris, and privies).

SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List, which may be obtained from the CAL FIRE website, as appropriate. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

An updated Native American contact list was obtained from the Native American Heritage Commission (NAHC) on July 7, 2022. This response also included search results from NAHC's sacred lands database; a negative result was returned indicating that the project area contains a sacred tribal resource. On July 29, 2022, letters inviting the tribes to consult were mailed to the 12 tribal representatives indicated by NAHC as well as those on CAL FIRE's tribal contact list for Santa Clara County. These letters identified the location, treatment types, purpose of the treatments, and requested information concerning the location of any cultural resources that may exist within the project area. On July 29, 2022 the Tamien Nation replied and requested consultation, which has concluded without the identification of additional sites or requested revisions to the SPRs.

SPR CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. This SPR applies to all treatment activities and treatment types	Yes	SJW Prior	CAL FIRE

Pre-field research included review of site records from the NWIC and reference materials.

SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

An archaeological survey will be conducted for the project area by an archaeologically trained resource professional or qualified archaeologist prior to the start of treatments.

SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

Identified resources will be avoided. Notification letters will be sent to culturally affiliated tribes if cultural resources are identified that cannot be avoided.

SPR CUL-6 Treatment of Tribal Cultural Resources: If a tribal cultural resource is identified within a treatment area, and cannot be avoided, the project proponent in consultation the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

Identified resources will be avoided.

SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

Five built environment historic features were identified in the NWIC record search. Although it is not known if they are historical resources under CEQA, these will be avoided during project implementation.

SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

All crew members and contractors implementing treatment activities will be trained on the protection of sensitive archaeological or tribal cultural resources prior to the start of treatments.

MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified professional archaeologist or CAL FIRE archeological trained Registered Professional Forester will assess the significance of the find.	Yes	SJW During	CAL FIRE

Should project activities reveal cultural or archaeological resources, CAL FIRE's standard post-review discovery procedures will be implemented, which require work to cease within 100 feet of the discovery and the Unit Archaeologist and Unit FHG Forester to be contacted. Work will not resume until direction is provided by the Unit Archaeologist.

BIOLOGICAL RESOURCES

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

Initial and maintenance treatment activities (i.e., mechanical treatments, manual treatments, and limited herbicide application [only to be applied to cut stump treatments on eucalyptus, acacia, or other undesirable invasive exotic trees]) could result in adverse effects on special-status plant species (see Attachment B for additional detail). The potential for treatment activities to result in adverse effects on special-status plant species was examined in the PEIR. This impact on special-status plants is within the scope of the PEIR because the proposed treatment types and activities and the intensity of disturbance that would result from implementing the proposed treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the potential for special-status plant species to occur within the project area is essentially the same within and outside the treatable landscape; therefore, the potential impact related to special-status plant species is also the same as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources. SPRs applicable to the proposed project are BIO-1, 2, 7, 9; AQ-4; GEO-1, 3, 4, 5, 7; and HYD-5. Mitigation measures BIO-1a and BIO-1b are also applicable to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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

Initial and maintenance treatment activities (i.e., mechanical treatments, manual treatments, and limited herbicide application) could result in adverse effects on special-status wildlife (see Attachment B for detailed information). The potential for treatment activities to result in adverse effects on special-status wildlife was examined in the PEIR. This impact on special-status wildlife is within the scope of the PEIR because the proposed treatment types and activities and the intensity of disturbance that would result from implementing the proposed treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the potential for special-status wildlife species to occur within the project area is essentially the same within and outside the treatable landscape; therefore, the potential impact related to special-status wildlife species is also the same, as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources. SPRs applicable to the proposed project are BIO-1, 2, 3, 4, 5,10; HYD-1, 4, 5; and HAZ-5, 6. Mitigation measures BIO-2a, 2b, 2e, 2g, 3a, 3b, 3c, 4 are also applicable to the proposed 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.

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

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on sensitive habitats, including riparian habitat, sensitive natural communities, chaparral and coastal sage scrub (see Attachment B for detailed information). The potential for treatment activities, including maintenance treatments, to result in adverse effects on sensitive habitats and sensitive natural communities was examined in the PEIR. This impact on sensitive habitats and sensitive natural

communities is within the scope of the PEIR because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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 present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on sensitive habitats is also the same, as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources. SPRs applicable to the proposed project are BIO-1, 2, 3, 4, 5, 6, 9; and HYD-4, 5. Mitigation measures BIO-3a, 3b, 3c are also applicable to the proposed 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.

Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, 3.6	PS	SPR BIO-1 SPR HYD-1, 3, 4, 5 MM BIO- 4	Yes	LTSM	☒

Initial and maintenance treatments could result in direct or indirect adverse effects on state or federally protected wetlands. An aquatic resource delineation has not been conducted and wetlands are mapped in the treatment area by the National Wetlands Inventory (USFWS 2022). Additional wetlands may be present throughout the project area that have not been identified or mapped as well as ponds smaller than one acre (i.e., not considered a lake under Forest Practice Rules), seasonal wetlands, springs, and seeps. The potential for treatment activities to result in adverse effects on state or federally protected wetlands was examined in the PEIR. Based on review and survey of project-specific biological resources, the project area contains numerous perennial (Class I) and intermittent (Class II and Class III) streams, ponds, reservoirs, as well as freshwater emergent wetland and forested/shrub wetland features. This impact on wetlands is within the scope of the PEIR because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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, general habitat characteristics are essentially the same within and outside the treatable landscape (i.e., no resource is affected outside the treatable landscape that would not also be similarly affected within the treatable landscape); therefore, the potential impact on wetlands is also the same, as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources. SPRs applicable to the proposed project are BIO-1; and HYD-1, 4, 5. Mitigation measure BIO-4 is also applicable to the proposed 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.

Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	Impact BIO-5, 3.6	PS	SPR BIO-1, 4, 5, 10, 11 SPR HYD-1, 4 MM BIO-5	Yes	LTSM	☒

Treatment activities (i.e., mechanical treatments, manual treatments, and limited herbicide application) could result in adverse effects on wildlife movement corridors and nursery sites. The potential for treatment activities to result in adverse effects on wildlife movement corridors and nursery sites was examined in the PEIR.

The project area is located in a critical habitat linkage (regional wildlife movement corridor) identified in the map of Critical Linkages (Penrod et al. 2013). In addition, the project area is likely used for local movements by wildlife (e.g., mule deer). The implementation of mechanical treatments, manual treatments, and limited herbicide application for ecological restoration and the implementation of fuel breaks would not result in landscape level conversion of existing habitat types in the project area. Therefore, treatments would not cause substantial loss of existing movement habitat or result in the construction of any permanent barrier to wildlife movement. Treatment activities may temporarily interrupt wildlife movement in the portions of the project area where activities are occurring; however, the proposed treatments would not be implemented throughout the entire project area in any given year; therefore, land would remain available within the project area to facilitate wildlife movement and a substantial adverse effect on movement would not occur.

No known common wildlife nursery sites (e.g., deer fawning areas, common bat maternity roosts, wading bird rookeries) are located within the project area and no indications of nursery sites were identified during field surveys. However, mule deer are known to occur in the area, and could use portions of the project area that are not subject to human disturbance for fawning during the fawning season (May 1 to August 31) (Sommer et al. 2007).

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the potential for wildlife movement corridors and wildlife nurseries within the project area are essentially the same within and outside the treatable landscape; therefore, the potential impact related to wildlife movement corridors and wildlife nurseries is also the same, as described above. This impact on wildlife movement corridors and nursery sites is within the scope of the PEIR because effects on wildlife movement corridors and nursery sites was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources. SPRs applicable to the proposed project are BIO-4, 5, 9; and HYD-1, 4. Mitigation measure BIO-5 is also applicable to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	Impact BIO-6, 3.6	LTS	SPR BIO-1, 2, 3, 4, 5, 12	Yes	LTS	☒

Treatment activities (i.e., mechanical treatments, manual treatments, and limited herbicide application) could result in adverse effects on the habitat or abundance of common wildlife. The potential for treatment activities to adversely affect the habitat or abundance of common wildlife was examined in the PEIR.

The vegetation communities (see Table B-1 in Attachment B) within the project area provide nesting habitat for common ground nesting and shrub nesting birds as well as common tree and cavity nesting species. The implementation of treatments in grassland, chaparral, forest, and woodland habitat would result in temporary disturbance of nesting habitat but would not result in substantial permanent habitat removal or landscape level type conversion. Treatments implemented in chaparral will be designed to avoid type conversion of chaparral vegetation and to maintain chaparral habitat function. For ecological restoration treatments, this will include determining appropriate treatment based on current fire return interval departure and condition class of the chaparral vegetation onsite, retaining at least 35 percent relative final density of mature chaparral vegetation, and retaining a mix of middle to older aged shrubs to maintain heterogeneity. For fuel break treatments in chaparral habitat, treatments will be designed to maintain a minimum percent cover to maintain habitat function. Therefore, the adverse effects of the treatments on habitat for common nesting birds would not be substantial and habitat function would be maintained for common wildlife.

Treatment activities may occur within portions of the nesting bird season (February 1–August 31). Therefore, treatment activities could result in direct loss of active nests or disturbance to active nests of cavity, ground, and shrub nesting species due to auditory and visual stimuli (e.g., heavy equipment, chainsaws, vehicles, personnel), potentially resulting in abandonment and loss of eggs or chicks.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the habitat characteristics within the project area are essentially the same within and outside the treatable landscape; therefore, the potential impact related to the reduction of common wildlife habitat and common wildlife abundance is also the same, as described above. This impact on habitat or abundance of common wildlife, including nesting birds, is within the scope of the PEIR because effects on habitat or abundance of common wildlife were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources. SPRs applicable to the proposed project are BIO-1, 2, 3, 4, 5, 12. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, 3.6	No Impact	SPR AD-3	Yes	LTS	☒

The potential for treatment activities to result in conflicts with local policies or ordinances was examined in the PEIR. Three ordinances relevant to biological resources were identified for the project area. This includes the Santa Clara County Tree Preservation and Removal Ordinance (Division C16 Tree Preservation and Removal). This ordinance applies to the removal of all protected trees on public and private property in designated areas in the County. Protected trees include trees that have a main trunk or stem 37.7 inches or greater in circumference at 4 ½ feet above the ground, or a 75.4 circumference for multi-trunk trees, that are on parcels zoned as “hillsides” and are three acres or less, parcels that are within a “-d” (Design Review) combining zoning district, or parcels in the Los Gatos Hillside Specific Plan Area. Heritage trees are also protected trees ("Heritage trees" are trees designated as significant by the County to have special significance to the community, and which has therefore been included in the heritage resource inventory adopted by resolution of the Board of Supervisors). For removal of protected trees, a permit must be obtained from the County Planning Office. Exceptions includes any trees removed on properties with a comprehensive vegetative management program approved by the County. Where the project is within the town limits of Los Gatos, the Los Gatos Tree Protection Ordinance (Chapter 9, Article I, Division 2) applies. This ordinance applies to all trees with a diameter of at least four inches located on property that is not residential property and all Heritage trees ("Heritage trees" are trees or grouping of trees specifically designated by action of the Town Council, upon the recommendation of the Historic Preservation Commission, that possess exceptional aesthetic, biological, cultural, or historic value and expected to have a continuing contribution to the community) and large protected trees (“large protected trees” are any oak (*Quercus* spp.), California buckeye (*Aesculus californica*), or Pacific madrone (*Arbutus menziesii*) with a 24-inch or greater diameter or any other species of tree with a 48-inch or greater diameter). With the exception of Heritage trees and large protected trees, the requirement for a permit for removal is exempt when removal or maintenance of a tree to conform with the implementation and maintenance of Defensible Space (Chapter 9 - Fire Prevention and Protection). Heritage trees and large protected trees require a permit for removal and tree pruning (Section 29.10.0982).

Where the project is in the city limits of Saratoga, the Saratoga Tree Ordinance applies (Chapter 15, Article 15-50). The ordinance applies to native trees with at least a six-inch DBH, any tree with at least a 10-inch DBH, any street tree (“street tree” is any tree within the Public Street or right-of-way), any heritage tree (“heritage tree” is any tree of historic significance as a tree having historic value related to the heritage of the City and designated by action of the City Council upon recommendation of the Heritage Preservation Commission), any tree required to be planted or retained as a condition of any approval, and any tree required to be planted as a replacement. Trees protected under the ordinance require a removal permit and may require a pruning permit, depending on how much is being pruned. Exceptions include an emergency exception if the condition of the tree presents an immediate hazard to life or property.

The project area is on private land. Per SPR AD-3 treatments would be designed and implemented 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. As such, SJW

will acquire tree removal permits as required per the ordinances described above unless exceptions are applicable to the project. Treatment activities, including maintenance treatments, would not result in removal of any trees greater than 16 inches DBH. With this DBH limit, as well as by acquiring tree removal permits, there would be no conflict with local ordinances as a result of implementation of treatment activities. The potential for the proposed treatments to conflict with local policies is within the scope of the PEIR because vegetation treatment locations, types, and activities are consistent with those analyzed in the PEIR. The SPR applicable to the proposed project is SPR AD-3. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the project area boundary, the existing regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential for conflicts with local policies or ordinances is also the same, as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources such that a conflict could occur. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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

The majority of the project area is not located within a habitat conservation plan (HCP) or natural community conservation plan (NCCP) area. However, two small treatment areas encompassing a combined area of approximately 0.9 acre are located within the permit area for the Santa Clara Valley Habitat Plan, an HCP/NCCP. These treatment areas are located at the western edge of the permit area and are not located within HCP/NCCP reserves. Prior to initiation of treatments within the Santa Clara Valley Habitat Plan permit area, SJW will determine in cooperation with Santa Clara County if the specific treatment prescriptions proposed would require permitting under the HCP/NCCP and will comply with all requirements for activities covered under the Santa Clara Valley Habitat Plan. Accordingly, implementation of the proposed project would not conflict with the provisions of an adopted natural community conservation plan (NCCP), habitat conservation plan (HCP), or other approved habitat plan, and no impact would result.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the potential for conflict with an adopted HCP or NCCP within the project area are essentially the same within and outside the treatable landscape; therefore, the potential impact related to conflict with an adopted HCP or NCCP is also the same, as described above. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to biological resources such that a conflict could occur. This impact is within the scope of the PEIR because conflict with an HCP or NCCP was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined that they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.6.1, "Environmental Setting," and Section 3.6.2, "Regulatory Setting," in Volume II of the Final PEIR).

The inclusion of land in the project 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 biological 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 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. The use of air curtain burners would not cause impacts in addition to those discussed in the PEIR. Therefore, no new impact related to biological resources would occur.

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

The California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2022) and CDFW's California Natural Diversity Database (CNDDB) (CNDDB 2022) were reviewed on May 27, 2022, for specific information on documented observations of special-status species previously recorded in the project area and vicinity. A search of the CNDDB and CNPS Inventory was conducted for the following U.S. Geological Survey 7.5' quadrangles surrounding the project area: Loma Prieta, Laurel, Felton, Castle Rock Ridge, Los Gatos, Santa Teresa Hills, Watsonville East, Watsonville West, Soquel, Santa Cruz, Davenport, Big Basin, Mindego Hill, Cupertino, San Jose East, San Jose West, Lick Observatory, Morgan Hill, and Mt. Madonna. For special status plants, Consortium of California of Herbaria (CCH2 2022), Jepson eFlora (Jepson Flora Project 2022), and Calflora (Calflora 2022) were also consulted. In addition, Appendix BIO-3 (Tables 1a, 1b, and 19) in Volume II of the Final PEIR were reviewed for sensitive natural communities, habitat information, and special-status plants and wildlife that could occur in the Central California Coast ecoregion. These database queries identified 80 special-status plants and 50 special-status wildlife species in the search area.

Following the database queries, a reconnaissance survey of the project area was conducted on June 8 and 9, 2022. Based on this reconnaissance survey, the database queries, habitat suitability, habitat quality, other reports of occurrence, distance from known detections, other biological factors, and consultation with biologists from Nomad Ecology, it was determined that 28 special-status plants and 28 special-status wildlife species could or are known to occur within the project area. Complete lists of special-status species reviewed for the project and their potential to occur within the project area are presented in Attachment B. Based on the results of the data review and reconnaissance-level survey, it was determined that for wetlands and certain special-status wildlife, suitable habitat is present but adverse effects can be clearly avoided (Attachment B). However, for special-status plants, sensitive natural communities, sensitive habitats, and other certain special-status wildlife species, suitable habitat is present and adverse effects cannot be clearly avoided (Attachment B). For these biological resources, where suitable habitat is present and adverse effects cannot be clearly avoided, further review and surveys will be conducted.

SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

Biological resource training for workers will be conducted prior to and during implementation of treatments, as necessary.

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

SPR BIO-1 determined that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided. A certified botanist will conduct a survey following the CDFW “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities” prior to the start of treatment activities (CDFW 2018). Sensitive natural communities and other sensitive habitats, including oak woodlands, within the project area will be mapped by a qualified biologist or botanist during this survey.

SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

Class I, II, and III watercourses occur throughout the project area. WLPZs and ELZs will be established adjacent to all Class I, Class II, and Class II streams within the project area.

Herbicide will only be applied in non-riparian areas and areas where there is no possibility the herbicide could come into direct contact with water. Herbicides will not be applied in the WLPZ or in areas delineated as wetlands.

Treatments in riparian habitats will retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation and will largely be limited to removal of uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants). Additionally, prior to any treatments in riparian habitat, SJW will notify CDFW pursuant to California Fish and Game Code 1602, when required.

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. These SPR requirements apply to all treatment activities and all treatment types. Additional measures will be applied to ecological restoration treatment types	Yes	SJW Prior	CAL FIRE

The project area contains chaparral and coastal scrub habitats (Attachment B). Treatments implemented in chaparral and coastal scrub will be designed to avoid type conversion of chaparral and coastal sage scrub habitats and to maintain the function of these habitats. This will include designing treatments based on current fire return interval (FRI) departure and condition class of the chaparral and scrub vegetation onsite, maintaining a minimum percent cover of mature native shrubs, and retaining a mix of middle to older aged shrubs to maintain heterogeneity. Refer to the discussion of chaparral under “Sensitive Natural Communities Impact Analysis” in Attachment B for details on treatment design parameters that would maintain chaparral and coastal sage scrub habitat function. Treatments in all sensitive habitats in the project area will be designed to maintain the membership rules of the affected vegetation alliance, maintain ecological function, and improve wildfire resilience.

SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle). This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

The pathogen *Phytophthora ramorum*, which causes SOD, is known within the project area (Santa Clara County 2009). Best Management Practices (BMPs) listed under SPR BIO-6 in Attachment A will be implemented, which includes cleaning and sanitizing vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site.

SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

It has been determined that potentially suitable habitat is present in the project area for 32 special-status plant species (see Impact BIO-1). Protocol surveys for the special-status plant species identified in Attachment B will be conducted in suitable habitat prior to treatments commencing. Seasonal avoidance measures can be implemented without conducting surveys when annual and geophytic species may be present (see Attachment B).

SPR BIO-8: Identify and Minimize Impacts in Coastal Zone ESHAs. This SPR applies to all treatment activities and only the ecosystem restoration treatment type.	No	SJW N/A	CAL FIRE

The project area is outside of the Coastal Zone; therefore, this SPR does not apply.

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

During reconnaissance surveys, invasive plant species such as yellow star-thistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*), French broom (*Genista monspessulana*) and numerous nonnative species were noted within the project area. SJW will implement the BMPs listed under SPR BIO-9 in Attachment A.

SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

Surveys will be required prior to treatment activities in suitable habitat for California giant salamander, coast range newt, coast horned lizard, Northern California legless lizard, Santa Cruz black salamander, western pond turtle, black swift, burrowing owl, golden eagle, grasshopper sparrow, loggerhead shrike, long-eared owl, purple martin, white-tailed kite, pallid bat, Townsend's

big-eared bat, American badger, ringtail, San Francisco dusky-footed woodrat, and wildlife nursery sites. Surveys will be required for Bay checkerspot butterfly, monarch butterfly, Crotch bumble bee, western bumble bee, California red-legged frog, and California tiger salamander, unless it is assumed that the species will occur within the project area and feasible mitigation is implemented based on that assumption.

SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). This SPR applies only to prescribed herbivory and all treatment types.	No	SJW N/A	CAL FIRE

The project does not include prescribed herbivory treatments; therefore, this SPR does not apply.

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

For treatments implemented during the nesting bird season (February 1–August 31), a survey for common nesting birds will be conducted within the project area prior to treatment activities. If active nests of common birds or raptors are observed during focused surveys, disturbance to the nests will be avoided by modifying treatments to avoid disturbance to the nests, deferring treatment until the nests are no longer active as determined by an RPF or qualified biologist, or establishing an appropriate buffer around the nests. Buffers will be established by a qualified biologist or RPF based on rationale such as species sensitivity, vegetative cover, nest height, and topography that will attenuate noise and visual disturbance. In addition, trees with raptor nests will be retained, whether or not the nest is occupied.

MM BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway).	Yes	SJW Prior-During	CAL FIRE

The five species-status plants listed under ESA or CESA, which include coyote ceanothus (*Ceanothus ferrisiae*), Ben Lomond spineflower (*Chorizanthe pungens* var. *hartwegiana*), and white-rayed pentachaeta (*Pentachaeta bellidiflora*), will be avoided and protected during treatment by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway).

MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement measures to avoid loss of individuals and maintain habitat function of occupied habitat.	Yes	SJW Prior-During	CAL FIRE

Measures will be implemented to avoid loss of individuals and maintain habitat function of occupied habitat for the 23 special-status plants not listed under ESA or CESA.

MM BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.	No	SJW N/A	CAL FIRE

This mitigation measure does not apply to the project. CAL FIRE will implement Mitigation Measures BIO-1a and BIO-1b to avoid impacts to species; therefore, no compensatory mitigation will be required.

MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)	Yes	SJW Prior-During	CAL FIRE

The measures listed in Attachment A will be implemented to avoid impacts to and maintain habitat function (e.g., suitable vegetative cover, nesting trees, host plants) for California red-legged frog, California tiger salamander, foothill yellow-legged frog, golden eagle, mountain lion, ringtail, and white-tailed kite. In addition, SJW will consult with CDFW and USFWS as appropriate in conformance with the requirements of MM BIO-2a.

MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.	Yes	SJW Prior-During	CAL FIRE

The measures listed in Attachment A will be implemented to avoid impacts to and maintain habitat function (e.g., suitable vegetative cover, nesting trees, host plants) for monarch butterfly, California giant salamander, coast range newt, coast horned lizard, Northern California legless lizard, Santa Cruz black salamander, western pond turtle, black swift, burrowing owl, grasshopper sparrow, loggerhead shrike, long-eared owl, purple martin, pallid bat, Townsend's big-eared bat, American badger, and San Francisco dusky-footed woodrat.

MM BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.	No	SJW N/A	CAL FIRE

This mitigation measure does not apply to the project. As required, Mitigation Measures BIO-2a, BIO-2b, BIO-2e, and BIO-2g will be implemented to reduce impacts to species. Compensatory mitigation is not warranted to mitigate residual impacts.

MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)	No	SJW N/A	CAL FIRE

This mitigation measure does not apply to the project because the project area is outside of the range of Valley elderberry longhorn beetle.

MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.	Yes	SJW Prior-During	CAL FIRE

Measures listed in Attachment A will be implemented to avoid impacts to and maintain habitat for bay checkerspot butterfly and monarch butterfly host plants.

MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)	No	SJW N/A	CAL FIRE

This mitigation measure does not apply because no special-status beetles, flies, grasshoppers, or snails have the potential to occur within the project area.

MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.	Yes	SJW Prior-During	CAL FIRE

Measures listed in Attachment A will be implemented to avoid or minimize impacts to and maintain habitat function (e.g., floral resources) for Crotch bumble bee and western bumble bee.

MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)	No	SJW N/A	CAL FIRE

The project does not include prescribed herbivory treatments; therefore, this Mitigation Measure does not apply.

MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.	Yes	SJW Prior	CAL FIRE

The project area potentially contains 36 sensitive natural communities as defined by CDFW and three (coast live oak woodland, interior live oak woodland, and blue oak woodland) oak woodland types (Attachment B). Under Mitigation Measure BIO-3a, a qualified RPF or biologist will determine the natural fire regime, condition class, and FRI for each sensitive natural community and oak woodland type. Initial and maintenance treatment activities in sensitive natural communities and oak woodlands will be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function.

MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands. If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.	Yes	SJW During-Post	CAL FIRE

If habitat function of sensitive natural communities and oak woodlands would not be maintained through implementation of Mitigation Measure BIO-3a, unavoidable losses of these resources will be compensated through restoration or preservation of these vegetation types within or outside of the project area.

MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.	Yes	SJW During-Post	CAL FIRE

WLPZs and ELZs will be established adjacent to all Class I, Class II, and Class III streams within the project area, and protections applied in all WLPZs and ELZs is anticipated to avoid the loss or degradation of riparian habitat functions. However, riparian habitat may be present beyond WLPZs and EEZs, which are primarily intended to protect water quality.

If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, unavoidable losses of these resources will be compensated through restoration or preservation of these vegetation types within or outside of the project area.

MM BIO-4: Avoid State and Federally Protected Wetlands	Yes	SJW Prior-During	CAL FIRE

There are several seasonal freshwater emergent wetlands and seasonal freshwater wetland forested/shrub areas within the project area. Because WLPZs established would not apply to seasonal wetland habitat, a qualified RPF or biologist will delineate the boundaries of these seasonal wetlands and associated riparian habitat and will establish a no-disturbance buffer of at least 25 feet with flagging or fencing. Ground disturbance will be prohibited within this buffer.

MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites	Yes	SJW Prior-During	CAL FIRE

If wildlife nursery habitat is identified during SPR BIO-10 surveys, treatment activities could result in disturbance of nursery behavior causing loss of young or result in direct removal of nursery habitat and this mitigation measure will apply. A qualified RPF or biologist will establish buffers around active deer fawning sites during the fawning season of the appropriate size prior to implementation of treatment activities. The appropriate size and shape of the buffer will be based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors.

GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	Impact Geo-1, 3.7	LTS	SPR GEO-1, 2, 3, 4, 5, 6, 7, 8, SPR HYD-3, 4 SPR AQ- 3, 4 SPR HYD- 4	Yes	LTS	☒

The table below includes a summary of the six designated soil types that may be present in the project area. The Montara association (15 to 50 percent slopes) and Maymen-Los Gatos-Gaviota association (30 to 75 percent slopes, severely eroded) are the two major soil associations found in the watershed and are made up of upland soils (NRCS 2022).

6 main Soil Types in the upper Los Gatos Creek Watershed
Montara association, 15 to 50 percent slopes
Maymen-Los-Gatos-Gaviota association, 30 to 75 percent slope
Sunnyvale-Castro-Clear Lake association
Zamora-Pleasanton association
Arbuckle-Pleasanton association
Keefers-Hillgate association, 2 to 9 percent slope

Much of the Los Gatos Creek Watershed has poorly infiltrating soils. The erosion potential of each soil type (NRCS 2022) and their percent make up by subwatershed in the upper Los Gatos Creek Watershed project area is presented in the following table (Horizon Water and Environment and Dudek 2021: 3-7).

Subwatershed in upper Los Gatos Creek Watershed	Hydrologic Soil Group	Percent Cover in Subwatershed	Erosion Potential
Lake Elsman	Type D	98	Very High
Hooker Gulch	Type D	76	Very High
	Type B and C	24	Moderate to High
Upper Canvanee Creek	Type B	70	Moderate
	Type C	15	High
	Type D	15	Very High
Beardsley Creek	Type B	80	Moderate
	Type D	15	Very High
	Type C	5	High
Trout Creek	Type D	84	Very High
	Type C	15	High
	Type B	<1	Moderate

Initial treatment and maintenance treatments would include mechanical treatment, manual treatment, and limited herbicide application. All these activities would result in vegetation removal and soil disturbance. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. This impact is within the scope of the PEIR because the use of and type of equipment, extent of vegetation removal, and herbicide use are consistent with those analyzed in the PEIR.

The Inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the soil characteristics of the project area are the same within and outside the treatable landscape; therefore, the potential impact related to soil erosion is not substantially greater than described in the PEIR. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance or other effects to soils. The SPRs applicable to the proposed project are SPR GEO-1 through 5, GEO-7, GEO-8, AQ-4, HYD-4. 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 GEO-2: Increase Risk of Landslide	Impact Geo-2, 3.7	LTS	SPR GEO-3, 4, 7, 8, SPR AQ- 3	Yes	LTS	☒

Initial and maintenance treatments would include vegetation removal in areas with steep slopes. According to the Safety and Noise Element of the Santa Clara County General Plan, there is potential for landslides after seismic activity on hillsides that also have saturated and unconsolidated soils (SCC 1994). Much of the project area is on hillsides where mechanical treatment will take place on slopes approximately less than 35 percent slope with some equipment travel occurring on slopes between 35 – 50% predominantly to provide access between polygons or reaching with mechanized equipment from an existing road to conduct treatments. Manual treatment may predominantly occur on slopes greater than 35 percent. Minimum vegetation cover retention will be maintained to reduce risk of landslides. The potential for treatment activities to increase landslide risk was examined in the PEIR. This impact is within the scope of the PEIR because the extent of vegetation removal and required avoidance of steep slopes and areas of instability are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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 range of slopes and landslide conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Therefore, the potential impact related to landslide risk is not substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR GEO-3, GEO-4, GEO-7, GEO-8. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbing activities that could increase risk of landslide. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts to Geology, Soils, Paleontology, And Mineral Resources: Would the project result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.7.1, “Environmental Setting,” and Section 3.7.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Inclusion of land in the project 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 geology and soils 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. Use of air curtain burners would not cause impacts in addition to those discussed 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 geology and soils would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Mechanical and herbicide treatments and maintenance activities will be suspended during heavy precipitation events to minimize the risk of soil compaction and disturbance.

SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Operators will avoid driving heavy equipment and other high ground pressure vehicles on saturated soils to minimize the risk of soil compaction and disturbance.

SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.	Yes	SJW During-Post	CAL FIRE

SJW will stabilize soils following proposed mechanical treatments that result in exposure of bare soil over 50 percent or more of the project area. This project includes chipping materials and scattering the chips within the treated areas, which will reduce the amount of exposed bare soil following treatments.

SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

The rainy period for this project area is mid-October through April. After the first storm event where 1.5 inches of rain or more falls within a 24-hour period, the project area will be inspected to determine if erosion control measures functioned properly. If any area is identified where erosion could result in substantial discharge, the area will be stabilized within 48 hours of the rainfall event.

SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.I) of the California Forest Practice Rules. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Stormwater runoff will be drained via water breaks to minimize the risk of erosion occurring within the project area or on road infrastructure following mechanical and manual treatments that may compact or disturb soils.

SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types.	No	SJW N/A	CAL FIRE

The project does not include pile burning.

SPR GEO-7 Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads. This SPR applies to all treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

The use of heavy equipment (i.e., bulldozers, masticators, and chippers) will not occur on slopes over 50 percent where the erosion hazard rating is high or extreme.

SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types.	Yes	SJW During	CAL FIRE

The use of heavy equipment (i.e., bulldozers, masticators, and chippers) for mechanical treatment activities will not occur on slopes over 65 percent or slopes steeper than 50 percent where the erosion hazard rating is high or extreme. For other treatment activities, an RPF or licensed geologist will evaluate project areas with slopes greater than 50 percent for any unstable areas and unstable soils. If these areas are unavoidable, additional measures would be implemented to ensure that substantial erosion or loss of topsoil would not occur.

GREENHOUSE GAS EMISSIONS

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GHG-1: Conflict with applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs	Impact GHG-1, 3.8	LTS	SPR GHG- 1	Yes	LTS	☒

The use of vehicles and mechanical equipment during initial and maintenance treatments would result in greenhouse gas (GHG) emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. Consistent with the PEIR, although GHG emissions would occur from equipment and vehicles used to implement treatments, the purpose of the proposed project is to reduce wildfire risk, which could reduce GHG emissions and increase carbon sequestration over the long term. This impact is 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.

The inclusion of land in the project 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 areas within the treatable landscape. Additionally, the area outside of the treatable landscape, 172.9 acres, is not substantial in comparison to expected annual statewide treatment area of 250,000 acres; thus, the increase in the use of vehicles and mechanical equipment, and related emissions, would not be substantially greater than that analyzed in the PEIR (i.e., within the treatable landscape). Air curtain burners are proposed to reduce GHG emissions and provide long-term carbon sequestration benefits, as described below in Impact GHG-2. Therefore, the GHG impact is substantially similar to as described in the PEIR. 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 GHG-2: Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, 3.8	PSU	SPR AQ- 3 MM GHG- 2	Yes	SU	☒

The use of vehicles and mechanical equipment during initial and maintenance treatments would result in GHG emissions. The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR and found to be significant and unavoidable after the application of all feasible mitigation measures because of the infeasibility of implementing specific emission

reduction techniques and the uncertainties associated with all the parameters and objectives of prescribed burning. Prescribed burning, including pile burning and broadcast burning, is not proposed under this project; however, SJW is proposing the use of air curtain burners. The essential function of this technology is to reduce smoke, and resultant GHG emissions, compared to pile burning by consuming biomass quickly and efficiently. According to a 2020 study of biomass, air curtain burners emit 54 percent less CO_2 emissions compared to pile burning (Puettman et al. 2015, as cited in Ascent 2022). Additionally, the production of biochar by these technologies and subsequent application as a soil amendment provides long-term carbon sequestration benefits.

As listed in the CalVTP PEIR Table 3.8-3, mechanical treatments are estimated to produce between 0.92 and 0.07 MTCO2e/ acre (depending on vegetation type) and manual treatments are estimated to produce between 0.69 and <0.01 MTCO2e/acre (depending on vegetation type). The estimated calculation derived from the values in the CalVTP PEIR Table 3.8-3 does not include the GHG emissions from vehicle transport, including the transportation of equipment and contractors. The GHG emissions produced from this treatment project are within the scope of the impacts evaluated in the PEIR because the proposed activities, equipment and duration of use, and the intent of the treatments to reduce wildfire risk and GHG emissions associated with wildfire are consistent with those analyzed in the PEIR. Although use of biomass processing technologies would substantially reduce GHG emissions, emissions generated by the treatment would still contribute to the annual emissions generated by the CalVTP, and this impact would remain significant and unavoidable, consistent with, and for the same reasons described in, the PEIR.

The inclusion of land in the project 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 climate conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Additionally, the area outside of the treatable landscape, 172.9 acres, is not substantial in comparison to expected annual statewide treatment area of 250,000 acres; thus, the increase in the use of vehicles and mechanical equipment, and related emissions, would not be substantially greater than that analyzed in the PEIR (i.e., within the treatable landscape). Therefore, the GHG impact is substantially similar to as described in the PEIR. This impact would remain significant and unavoidable as explained in the PEIR, but for the reasons explained above, would not constitute a new or substantially more severe significant impact.

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

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE 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 Section 3.8.1, “Regulatory Setting,” and Section 3.8.2, “Environmental Setting,” in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the project area 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 the climate conditions 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, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the proposed treatments and inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts. Air curtain burners produce smoke and associated GHG emissions, albeit less than prescribed burning, and would not cause impacts in addition to those discussed in the PEIR. Therefore, no new impact related to GHG emissions would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types.	Yes	SJW Prior	CAL FIRE

SPR GHG-1 is not applicable to the proposed project because this project is not a registered offset project under the Board's Assembly Bill 1504 Carbon Inventory Process.

MM GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.	No	SJW N/A	CAL FIRE

The project does not include prescribed burning; therefore, this mitigation measure is not required. However, SJW is proposing the use of air curtain burning, which would result in fewer GHG emissions than pile burning and is contemplated for this purpose under Mitigation Measure GHG-2.

ENERGY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	Impact ENG-1, 3.9	LTS	N/A	Yes	LTS	☒

The use of vehicles and mechanical equipment during initial treatment and treatment maintenance activities would result in the consumption of energy through the use of fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the PEIR. The consumption of energy during implementation of the 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.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, energy consumption is essentially the same within and outside the treatable landscape; therefore, the energy impact is substantially similar to that described in the PEIR. The use of curtain burners would require some use of diesel for the generator that powers the fan; however, it would be minimal as compared to other equipment used for vegetation treatment and would not result in greater energy use than described in the PEIR. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

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

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE 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 (refer to Section 3.9.1, “Regulatory Setting,” and Section 3.9.2, “Environmental Setting,” in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the project area 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 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. Use of air curtain burners would not cause impacts in addition to those discussed in the PEIR. Therefore, no new impact related to energy resources would occur.

HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, 3.10	LTS	SPR HAZ- 1 SPR HYD-4	Yes	LTS	☒

Initial and maintenance treatments would include manual, mechanical, and limited herbicide treatments. These treatment activities would require the use of fuels, which are hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the PEIR. 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. The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the exposure potential and regulatory conditions are essentially the same within and outside the treatable landscape; therefore, the potential to create a significant health hazard from use of hazardous materials is not substantially greater than described in the PEIR. The SPR applicable to the proposed project is SPR HAZ-1. The use of curtain burners would require some use of diesel for the generator that powers the fan; however, it would be minimal as compared to other equipment used for vegetation treatment and would not result in greater impacts than described in the PEIR. 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: Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, 3.10, Appendix HAZ-2	LTS	SPR HAZ-5, 6, 7, 8, 9	Yes	LTS	☒

Treatments would include limited cut stump herbicide application on approximately 11.4 acres. The potential for treatment activities to cause a significant health hazard from the use of herbicides was examined in the PEIR. This impact is within the scope of the PEIR, because within the boundary of the project area, the exposure potential is essentially the same within and outside the CalVTP treatable landscape and the types of herbicides (i.e., Triclopyr (Garlon 3 or 4) and Glyphosate (Round Up)) and application methods (i.e., direct application to freshly cut stumps on the cambium layer of the tree) that would be used 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 environmental and regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential to cause a significant health hazard from the use of herbicides is not substantially greater than described in the PEIR. SPRs HAZ-5 through HAZ-7 and HAZ-9 are

applicable to this treatment. 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: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, 3.10	PS	MM HAZ- 3	Yes	LTSM	☒

The project area is entirely on private land, owned by SJW. Manual treatments and limited herbicide application would be limited to the use of hand crews or herbicides to kill invasive exotic eucalyptus trees in the treatment area and would not churn the soil such that disturbance to known hazardous materials could occur. However, some activities (e.g., mechanical treatments) could result in churning up the surface of the ground during treatment as vegetation is removed, which could accidentally release hazardous materials into the environment if present. If released, hazardous material could enter waterways via runoff or expose the public to harmful effects through inhalation or dermal exposure. The potential for workers participating in treatment activities to encounter contamination that could expose them or the environment to hazardous materials was examined in the PEIR. This impact was identified as potentially significant in the PEIR because hazardous materials sites could be present within treatment sites, and soil disturbance in those areas could expose people or the environment to hazards. As directed by Mitigation Measure HAZ-3, database searches for hazardous materials sites within the project area have been conducted, and no hazardous materials sites were identified within 0.25 mile of the project area (DTSC 2022; CalEPA 2022; SWRCB 2022) (Attachment C).

The inclusion of land in the project 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 is also the same, as described above, and the potential to expose the public to hazardous materials is not substantially greater than described in the PEIR. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbance that could disturb hazardous materials sites. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts to Hazardous Materials, Public Health and Safety: Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE 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 (refer to Section 3.10.1, “Environmental Setting,” and Section 3.10.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land in the project 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, for the reasons described above, 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. Air curtain burners would be located on bare mineral soil or pavement and would not result in ground disturbing activities that could affect hazardous materials or public health and safety beyond that covered in the PEIR. Therefore, no new impact related to hazardous materials, public health, or safety would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

Manual and mechanical treatment crews will maintain all equipment in compliance with SPR HAZ-1 to minimize the risk of impacts resulting from leaks.

SPR HAZ-2 Require Spark Arrestors: This SPR applies only to manual treatment activities and all treatment types	Yes	SJW During	CAL FIRE

Chainsaws will not be operated without a spark arrestor and a chainsaw is considered out of service until a spark arrestor is installed.

SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Manual treatment crews will carry one fire extinguisher per chainsaw and vehicles will be equipped with one long-handled shovel and one axe or Pulaski.

SPR HAZ-4 Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

Crews will not be permitted to smoke in vegetated areas prior to or during treatment activities.

SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	SJW Prior	CAL FIRE

A spill prevention and response plan would be prepared before beginning herbicide treatments activities.

SPR HAZ-6 Comply with Herbicide Application Regulations. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	SJW Prior	CAL FIRE

SJW will coordinate with the Santa Clara County Agricultural Commissioner and obtain and required licenses and permits before implementing herbicide treatment activities.

SPR HAZ-7 Triple Rinse Herbicide Containers. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	SJW During-Post	CAL FIRE

All herbicides and adjuvant containers will be triple rinsed with clean water at an approved site and rinsate will be disposed of in a batching tank (3 CCR Section 6684).

SPR HAZ-8 Minimize Herbicide Drift to Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	No	SJW Prior-During	CAL FIRE

This SPR is not applicable because only cut-stump application methods would be used, which do not have the potential for drift.

SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	SJW Prior	CAL FIRE

Herbicide treatment notifications will be required within or adjacent to public and residential areas within 500 feet. Signs shall be posted at a specified location that shows the pertinent herbicide information prior to the start of the treatment, and notification shall remain posted at least 72 hours after ending the treatment application.

MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials.	Yes	SJW Prior	CAL FIRE

As discussed above, database searches for hazardous materials sites within the project area have been conducted, and no hazardous materials sites were identified within 0.25 mile of the project area (DTSC 2022; CalEPA 2022; SWRCB 2022) (Attachment C).

HYDROLOGY AND WATER QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	Impact HYD-1, 3.11	LTS	SPR HYD-4 SPR AQ-3 SPR BIO-4, 5 SPR GEO-4, 6 MM BIO-3b	No	N/A	☒

This impact does not apply to the proposed project because curtain burners would be use on a temporary basis and would not produce ash and debris in a similar manner as prescribed burning. There would be no adverse impacts on water quality related to the use of air curtain burners.

Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	Impact HYD-2, 3.11	LTS	SPR HYD-1, 4 SPR BIO-1 SPR GEO-1, 2, 3, 4, 7, 8 SPR HAZ-1	Yes	LTS	☒

The project area is primarily in the upper Los Gatos Creek Watershed. The Los Gatos Creek Watershed Maintenance Manual prepared by the San Jose Water Company identifies that there are many small creeks and unnamed water courses that drain into the Los Gatos Creek, which fills Lexington Reservoir, Lake Elsman, and Williams Reservoir along its course. The named creeks that drain into Los Gatos Creek in the project area from north to south are as follows; Trout Creek, Beardsley Creek, Black Creek, Canavee Creek and Hendrys Creek. The project area also surrounds Lake Kittredge and Lake Couzzens, located approximately 1.5 miles east of Lexington Reservoir. The streamflow in Los Gatos creek is perennial and is influenced by the releases from the reservoirs. In wet years, the creeks mentioned above are also perennial (Horizon Water and Environment and Dudek 2021:3-16 through 3-22).

The project would include mechanical treatments, and manual treatments. All qualifying manual and mechanical treatments implemented under the CalVTP would integrate SPRs into treatment design to protect watercourses, limit equipment use on wet soils or steep slopes, stabilize highly disturbed areas, prevent concentration of runoff in non-shaded fuel breaks, and prevent spill or leaks from equipment. Within the project area, Saratoga Creek is considered to be a Class I watercourse. No herbicides would

be applied within the WLPZ established for this or other watercourses in the project areas. Implementation of SPRs would avoid and minimize the risk of substantial degradation to surface or groundwater quality from manual or mechanical treatment activities.

The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the use of heavy equipment and hand-held tools to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR. The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the watershed associated with the project area is the same in areas within and outside of the treatable landscape, and the treatment types and activities proposed for the project are consistent with those included in the PEIR. Therefore, the potential to affect water quality from manual and mechanical treatments is not substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR HYD-1, HYD-4, BIO- 1, GEO-1, GEO-2, GEO-3, GEO-4, GEO-7, GEO-8, HAZ-1. 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: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	Impact HYD-3, 3.11	LTS	SPR HYD- 3	No	N/A	☒

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

Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides	Impact HYD-4, 3.11	LTS	SPR HYD- 5 SPR BIO- 4 SPR HAZ- 5, 7	Yes	LTS	☒

Initial and maintenance treatments would include herbicide treatments on invasive exotic eucalyptus tree species and select invasive tree species of acacia or other undesirable, robust herbaceous vegetation, if necessary, in the project area. Only direct application would occur to freshly cut stumps on the cambium layer of the tree. Herbicide application would comply with all Environmental Protection Agency (EPA) label directions. No herbicides would be applied within WLPZs established for watercourses in the project areas. The potential for herbicide applications to violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR the types of herbicides (i.e., Triclopyr [Garlon 3 or 4] and Glyphosate [Round Up])and application methods that would be used are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the watershed associated with the project area is the same in areas within and outside of the treatable landscape, and the project application type is consistent with those included in the PEIR, and the treatment types and activities proposed for the project are consistent with those included in the PEIR. Therefore, the potential to adversely affect water

quality from herbicide application would not be is not substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR HYD-5, HAZ-5, HAZ-7. 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: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	Impact HYD-5, 3.11	LTS	SPR HYD-4, 6 SPR GEO- 5	Yes	LTS	☒

Initial and maintenance treatments could cause ground disturbance that could directly or indirectly modify existing drainage patterns. The potential for treatment activities to substantially alter the existing drainage pattern of a project area was examined in the PEIR. This impact to site drainage is within the scope of the PEIR because the types of treatments and treatment intensity are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the watershed associated with the project area is the same in areas within and outside of the treatable landscape, and the project application type is consistent with those included in the PEIR, and the treatment types and activities proposed for the project are consistent with those included in the PEIR. Therefore, the potential to alter existing drainage patterns of a treatment site or area is also the same, as described above, and would not be substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR HYD-5, HAZ-5, HAZ-7. Air curtain burners would be used on a temporary basis on a paved area or area devoid of vegetation and would not cause ground disturbance or otherwise affect existing drainage patterns. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts to Hydrology and Water Quality: Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.11.1, “Environmental Setting,” and Section 3.11.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land in the project 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 hydrology and water quality 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. Use of air curtain burners would not present any additional impact on hydrology in addition to those discussed in the PEIR. Therefore, no new impact related to hydrology and water quality would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

The State Water Resources Control Board is requiring all projects utilizing the CalVTP PEIR to follow the requirements of their Vegetation Treatment General Order, which would meet the requirements of SPR HYD-1. Users of the CalVTP PSA process are automatically enrolled in the General Order and are required to implement all applicable SPRs and mitigation measures from the PEIR. In addition, the General Order requires compliance with any applicable Basin Plan prohibitions.

SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

No new roads will be constructed under the proposed project.

SPR HYD-3 Water Quality Protections for Prescribed Herbivory: This SPR applies to prescribed herbivory treatment activities and all treatment types.	No	SJW N/A	CAL FIRE

SPR HYD-3 does not apply to the proposed project because herbivory would not be used within the project area.

SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916 .5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

WLPZs will be established for watercourses within the project area based on the widths and protective measures established for each water and slope class defined in Table I of 14 California Code of Regulations Section 916.5 (CalVTP Final PEIR Section 3.7-24). Class I – IV watercourses exist in the project area and many of the watercourses flow into the upper Los Gatos Creek watershed. Some unnamed water courses in the northern section of the project area may flow into Sanborn Creek, northwest of the Los Gatos Creek watershed. WLPZs ranging from 50 to 100 feet will be established adjacent to all Class I and II streams within the project area (e.g., Los Gatos Creek and tributaries), and WLPZs sufficient to prevent the degradation of downstream

beneficial uses of water (determined on a site-specific basis) will be established adjacent to all Class III (i.e., ephemeral) streams within the project area. In addition, Equipment Limitation Zones (ELZs) of at least 25 feet will be established around all Class III ephemeral streams within the project area.

WLPZs ranging from 50 to 100 feet will be established adjacent to all Class I and II streams within the project area (e.g., Los Gatos Creek and tributaries), and WLPZs sufficient to prevent the degradation of downstream beneficial uses of water (determined on a site-specific basis) will be established adjacent to all Class III (i.e., ephemeral) streams within the project area. In addition, Equipment Limitation Zones (ELZs) of at least 25 feet will be established around all Class III ephemeral streams within the project area.

SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: This SPR applies to herbicide treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Herbicides will be mixed in an area devoid of vegetation or outside of areas that can contaminate waterways. All herbicide application will comply with all EPA label directions and adhere to operational restrictions in place to minimize drift. Herbicide will not be applied in established WLPZs. Herbicide will be directly applied to freshly cut stumps so the herbicide will not be sprayed adjacent to species that may be special status.

There would be no riparian or aquatic application of herbicide. No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses.

SPR HYD-6 Protect Existing Drainage Systems: This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

All stormwater drainage infrastructure will be flagged prior to treatment activities to prevent disturbance or modification. If stormwater drainage infrastructure is inadvertently disturbed or modified, SJW will repair any damage and restore pre-project drainage conditions.

LAND USE AND PLANNING, POPULATION AND HOUSING

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	Impact LU-1, 3.12	LTS	SPR AD-3, 9	Yes	LTS	☒

The project area is entirely within private property, owned by SJW, in the upper Los Gatos Creek Watershed. Treatment activities on lands owned or managed by private owners, are generally required to comply with applicable city and county general plans and other local policies and ordinances. The potential for vegetation treatment activities to cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation was examined in the PEIR. This impact is within the scope of the PEIR because the treatment types and activities are consistent with those analyzed in the PEIR.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent considered in the PEIR. However, all land in the project area is owned by SJW, within and outside the treatable landscape. Treatment types would be consistent with those described in the PEIR. Therefore, the potential to conflict with a land use plan, policy or regulation is not substantially greater than described in the PEIR. Air curtain burners would be used on a temporary basis and would not affect a land use plan, policy, or regulation. The SPR applicable to the proposed project is SPR AD-3. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

Impact LU-2: Induce Substantial Unplanned Population Growth	Impact LU-2, 3.12	LTS	N/A	Yes	LTS	☒

The potential for initial treatments and maintenance treatments to result in substantial population growth as a result of increases in demand for employees was examined in the PEIR. Because of the temporary nature of the increase in demand for workers, the proposed treatments would not cause a need for new housing, roads, or infrastructure. Therefore, impacts associated with short-term increases in the demand for workers during implementation of the treatment project are within the scope of the PEIR. In addition, the proposed project would not require the hiring of new permanent employees.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the population and housing characteristics of the project area are essentially the same within and outside the treatable landscape. Therefore, the potential to induce unplanned population growth is also the same, as described above, and would not be substantially greater than described in the PEIR. Air curtain burners would be used on a

temporary basis and would not substantially increase employment rates for implementation of the project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR

Other Impacts related to Land Use and Planning, Population and Housing: Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed project is consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.12.1, “Environmental Setting,” and Section 3.12.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land in the project 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 conditions that are pertinent to land use and planning, population and housing 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. Air curtain burners would not cause impacts in addition to those discussed 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 land use and planning, population and housing would occur.

NOISE

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

The initial and maintenance treatments would include mechanical treatment that requires the use of heavy, noise-generating equipment. The potential for substantial short-term increase in ambient noise levels was analyzed in the PEIR. Short-term increases in noise from the use of heavy equipment is within the scope of the activities and impacts addressed in the PEIR because the types and number of equipment proposed, and the duration of use of the equipment are consistent with those analyzed in the PEIR. While treatments may be located near residences, they would occur during daytime hours, typically between 7:00 a.m. and 6:00 p.m. on weekdays and Saturdays between 9:00 a.m. and 6:00 p.m., which is consistent with the Santa Clara County Noise Ordinance, Section B-11-1520 (Santa Clara County 2022). This would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. In addition, treatments would be dispersed throughout the 1,947.9-acre project area so noise increases at any one sensitive receptor would be limited.

The inclusion of land in the project 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 exposure potential to any sensitive receptors present in the areas outside the treatable landscape are substantially similar to those within the treatable landscape; therefore, the noise impact is also the same, as described above, and would not be substantially greater than described in the PEIR. Air curtain burners would produce noise that would be of a similar level to other heavy equipment proposed for use under this project and described in the PEIR. The SPRs applicable to the proposed project are SPRs NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, NOI-6, AD- 3. 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: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	Impact NOI-2, 3.13	LTS	SPR NOI- 1	Yes	LTS	☒

The initial and maintenance treatments would require large trucks to haul heavy equipment and crews to the project site. These work trucks would pass by residential receptors, which could increase the single event noise levels (SENL). The potential for a substantial short-term increase in SENL was evaluated in the PEIR. Short-term increases in noise from the use of heavy equipment during project implementation is within the scope of the treatment activities and impacts addressed in the PEIR

because the number and types of equipment proposed are consistent with those analyzed in the PEIR. All truck trips and use of heavy equipment will be limited to daytime hours to avoid sleep disturbance of nearby residents.

The inclusion of land in the project 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 exposure potential is essentially the same within and outside the treatable landscape; therefore, the noise impact is also the same, as described, and would not be substantially greater than described in the PEIR. Truck trips associated with the use of air curtain burners would be related to bringing the equipment to the site and hauling biochar for distribution. This would result in similar noise levels as described for other elements of the project. The SPR applicable to the proposed project is SPR NOI-1. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts Related to Noise: Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities discussed in the PEIR. CAL FIRE has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.13.1, “Environmental Setting,” and Section 3.13.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land from outside the CalVTP treatable landscape in the project area 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 noise 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, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. Air curtain burners would not cause impacts in addition to those discussed in the PEIR. No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to noise would occur that is not analyzed in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

Per SPR NOI-1 noise-generating vegetation treatment activities will be limited to: Monday – Friday between 7:00 am and 6:00 pm, Saturdays between 9:00 am and 6:00 pm

SPR NOI-2 Equipment Maintenance: All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types.	Yes	SJW During	CAL FIRE

All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.

SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Engine shrouds will be closed during equipment operation.

SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses. This SPR applies to all treatment activities and treatment types.	Yes	SJW During	CAL FIRE

Equipment will be staged within the property boundaries and not immediately adjacent to any sensitive receptors.

SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

Equipment will be shut down when not in use and idling of equipment and haul trucks will be limited to 5 minutes.

SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	SJW Prior	CAL FIRE

Proposed treatment activities using heavy equipment will occur within 1,500 feet of residential noise-sensitive receptors. Several rural residences are present within 1,500 feet of treatment activities. No schools, hospitals, or places of worship are present within 1,500 feet of the project area. All noise-sensitive receptors will be notified prior to treatments.

RECREATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	Impact REC-1, 3.14	LTS	SPR REC- 1	Yes	LTS	☒

One small park, Chemeketa Park Playground, is within the treatment area off of Comanche Trail east of Hwy 17 in the Santa Cruz Mountains. It will not require closure because of treatment activities.

Other Impacts to Recreation: Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?				No	N/A	☒

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

Including land in the project 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; 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. Air curtain burners would not cause impacts in addition to those discussed in the PEIR. Therefore, no new impact related to recreation would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR REC-1 Notify Recreational Users of Temporary Closures. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure approximately 2 weeks prior to the commencement of the treatment activities. This SPR applies to all treatment activities and treatment types.	No	SJW N/A	CAL FIRE

One small park, Chemeketa Park Playground, is within the treatment area off of Comanche Trail east of Hwy 17 in the Santa Cruz Mountains. However, it will not require closure because of treatment activities.

TRANSPORTATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact TRAN-1: Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures	Impact TRAN-1, 3.15	LTS	SPR TRAN-1 SPR AD-3	Yes	LTS	☒

Initial and maintenance treatments would temporarily increase vehicular traffic on SR 17, SR 35, and private roadways, such as Alma Bridge Road and Montevina Road, in the project area. The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR. The proposed treatments would be short term, and temporary increases in traffic related to treatments are within the scope of the PEIR because the treatment duration and limited number of vehicles (i.e., heavy equipment transport, crew vehicles for crew members) associated with the proposed treatments are consistent with those analyzed in the PEIR. In addition, the proposed treatments would not all occur concurrently, and increases in vehicle trips associated with the treatments would be dispersed on multiple roadways.

The inclusion of land in the project 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 transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact is also the same, as described above, and would not be substantially greater than described in the PEIR. The SPR applicable to the proposed project is SPR TRAN-1. Truck trips associated with the use of air curtain burners would be related to bringing equipment to the site and hauling biochar for distribution. This would not result in a substantial increase in trips or general types of equipment (i.e., trucks and hauled equipment), and may reduce off-hauling of biomass that could occur without incineration of materials within the project site. 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: Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, 3.15	LTS	SPR TRAN-1 SPR HYD-2 SPR AD-3	Yes	LTS	☒

Initial and maintenance treatments would not require the construction or alteration of any roadways. SJW would coordinate with agency(ies) with jurisdiction over the affected roadways to determine whether a Traffic Management Plan (TMP) is needed. If it is needed, a TMP would be prepared and implemented to avoid and minimize temporary transportation impacts. The inclusion of

land in the project 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 transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are the same as those within the treatable landscape; therefore, the transportation impact is also the same, as described above, and would not be substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR TRAN-1 and AD-3. Air curtain burners would not require construction of additional roadways and would be placed in areas that are easily accessible and already paved or otherwise devoid of vegetation. 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-3: Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, 3.15	PSU	MM AQ-1	Yes	SU	☒

Initial and maintenance treatments could temporarily increase vehicle miles traveled (VMT) above baseline conditions because the project area is in a remote location and would require vehicle trips to access the project area. While trips by crew members to implement the proposed treatments would increase VMT, there could be a net reduction in VMT in the long term because travel for wildfire response could be reduced. As noted under Impact TRAN-3 in the PEIR, individual vegetation treatment projects under the CalVTP are reasonably expected to generate fewer than 110 trips per day, which would cause a less-than-significant transportation impact for specific later activities, as described in the *Technical Advisory on Evaluating Transportation Impacts*, published by the Governor's Office of Planning and Research (OPR 2018). Specifically, the PEIR assumed that individual vegetation treatment projects would accommodate up to 50 vehicles bringing crews and equipment to a treatment site in a day (i.e., 100 trips commuting to and from a treatment site each day, plus a few additional incidental trips during the day). 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. The proposed treatments are expected to require up to 12 workers for mechanical treatments, up to 20 workers for manual treatments, and 3 workers for herbicide application. Given these crew sizes, the proposed project would generate fewer than 110 trips. Because the project would generate VMT during project implementation, it would contribute to the environmental significance conclusion in the PEIR; therefore, for purposes of CEQA compliance, this PSA/Addendum notes the impact as significant and unavoidable.

The inclusion of land in the project 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 transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact for areas outside the CalVTP treatable landscape is also potentially significant and unavoidable, as described above. Truck trips associated with the use of air curtain burners would be related to bringing equipment to the site and hauling biochar for distribution. This would not result in a substantial increase in trips or general types of equipment (i.e., trucks and hauled equipment), and may reduce off-hauling of biomass that could occur without

incineration of materials within the project site. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts to Transportation: Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. CAL FIRE 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 (refer to Section 3.15.1, “Environmental Setting,” and Section 3.15.2, “Regulatory Setting,” in Volume II of the Final PEIR).

Including land in the project 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 transportation 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, for the reasons described above, 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. Air curtain burners would not cause impacts in addition to those discussed in the PEIR. Therefore, no new impact related to transportation would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

The proposed project would not result in a permanent increase in traffic beyond existing conditions for the local area. During treatment activities, vehicles would access the project area from SR 17, SR 35, and private roadways (e.g., Alma Bridge Road and Montevina Road). SJW will coordinate with the California Department of Transportation, County of Santa Clara, or other applicable agencies with jurisdiction to determine if traffic control is needed at any affected roadway segment within or surrounding the project area. At a minimum, signs will be placed along all affected roadways to advise motorists of slow vehicles entering and exiting these roadways.

PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	Impact UTL-1, 3.16	LTS	N/A	Yes	LTS	☒

Treatments would include manual, mechanical, and limited herbicide treatments. A minimal amount of water would be used for dust control during vegetation removal within non-shaded fuel breaks. The potential increased demand for water was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR because the type of treatments and water source type are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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 present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the water supply impact is also the same, as described above. Air curtain burners do not require water supply for operation. 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: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	SU	SPR UTIL- 1	Yes	SU	☒

The initial and maintenance treatments would generate biomass as a result of vegetation removal within the project area. The biomass generated during the project would be disposed by lopping and scattering within treatment boundaries, shipping chips to a biomass processing facility, use of curtain burners, or chips blown onto the ground as mulch. This impact was identified as potentially significant and unavoidable in the PEIR because biomass hauled off-site could exceed the capacity of existing infrastructure for handling biomass. This impact is within the scope of the activities and impacts addressed in the PEIR because the type of treatments and biomass disposal methods are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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, conditions related to biomass in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts related to biomass are also the same, as described above. There are multiple methods to dispose of biomass, as noted above. Therefore,

solid waste generation would not be greater than described in the PEIR. The SPR applicable to the proposed project is SPR UTIL-1. Air curtain burners produce biochar, which would be dispersed within SJW property or donated to local agricultural operations; no solid waste would be generated with their use and biomass would be reduced. 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-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	Impact UTL-3, 3.16	LTS	SPR UTIL-1	Yes	LTS	☒

The biomass generated during the project would be disposed by lopping and scattering within treatment boundaries, shipping chips to a biomass processing facility, use of curtain burners, or chips blown onto the ground as mulch would divert solid organic waste generated from treatment activities from solid waste facilities to biomass power plant, wood product processing facility, and/or composting for processing. This would decrease the amount of waste transported to solid waste facilities consistent with AB 939 and SB 1383. This impact is within the scope of the activities and impacts addressed in the PEIR because the type of treatments and biomass disposal methods are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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, conditions related to biomass in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts related to biomass are also the same, as described above There are multiple methods to dispose of biomass, as noted above. Therefore, solid waste generation would not be substantially greater than described in the PEIR. The SPR applicable to the proposed project is SPR UTIL-1. Air curtain burners produce biochar, which would be dispersed within SJW property or donated to local agricultural operations; no solid waste would be generated with their use and biomass would be reduced. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Other Impacts to Public Services, Utilities, and Service Systems: Would the project result in other impacts to public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?				No	N/A	☒

The proposed treatment is consistent with the treatment types and activities considered in the PEIR, and the project is consistent with the regulatory and environmental conditions presented in the PEIR (refer to Section 3.16.1, “Environmental Setting,” and Section 3.16.2, “Regulatory Setting,” in Volume II of the Final PEIR). However, within the boundary of the project area, the existing environmental conditions pertinent to public services, utilities, and service systems 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. Air curtain burners would not cause impacts in addition to those discussed in the PEIR. No changed circumstances would lead to new significant impacts not addressed in the PEIR. Therefore, no new impact related to public services, utilities, or service systems would occur that is not covered in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. This SPR applies only to mechanical and manual treatment activities and all treatment types.	Yes	SJW During	CAL FIRE

A Solid Organic Waste Disposition Plan will be prepared that identifies the amount of solid organic waste to be transported offsite and confirms that the receiving facility has the capacity to accept the biomass.

WILDFIRE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	Impact WIL-1, 3-17	LTS	SPR HAZ-2, 3, 4	Yes	LTS	☒

Initial and maintenance treatments would include mechanical and manual treatments using heavy equipment and increased human presence in high fire risk treatment areas, which could pose a risk of wildfire ignition. The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR. Increased wildfire risk associated with use of heavy equipment in vegetated areas are within the scope of the PEIR because the types of equipment and treatment duration of the proposed project are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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. The SPRs applicable to the proposed project are SPR HAZ-2, HAZ-3, HAZ-4. Air curtain burners would be located on bare mineral soil or pavement, with a minimum 100-ft clearance of all vegetation surrounding the burners (e.g., skid trails, roads, landings) and would be easily accessible by vehicles or a fire engine in case of an emergency. Thus, their operation would not substantially increase the risk of wildfire as compared to other types of equipment use during project implementation. 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: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	Impact WIL-2, 3-17	LTS	SPR AQ- 3 SPR GEO-3, 4, 5, 8	Yes	LTS	☒

The project does not include new housing and would not result in substantial unplanned population growth and would therefore not place people or structures in an area with risks related to post-wildfire flooding or landslides. Initial and maintenance treatments would include mechanical and manual treatments, and limited herbicide application. To the extent that the treatments reduce wildfire risk, they would decrease the risk of landslides and flooding in areas that could otherwise burn in a high severity wildfire without treatment. The potential for post-fire landslides to occur was examined in the PEIR. Potential exposure of people or structures to post-fire landslides is within the scope of the PEIR because the severity and duration of the proposed mechanical and manual fuel treatments are consistent with those analyzed in the PEIR.

The inclusion of land in the project 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; therefore, the risk of post-fire flooding or landslides is also the same, as described and would not be substantially greater than described in the PEIR. The SPRs applicable to the proposed project are SPR GEO 3, GEO-4, GEO-5, GEO-8. Use of air curtain burners would not result in conditions that could increase landslides or flooding. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

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

CAL FIRE 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 (refer to Section 3.17.1, “Regulatory Setting,” and Section 3.17.2, “Environmental Setting,” in Volume II of the Final PEIR).

Including land in the project 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. Use of air curtain burners would not cause impacts in addition to those discussed 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.

ADMINISTRATIVE STANDARD PROJECT REQUIREMENTS

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE would meet with the SJW to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior	CAL FIRE

Coordination will be conducted by CAL FIRE as needed.

SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. “Protected Resources” refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types.	Yes	SJW Prior-During	CAL FIRE

Prior to beginning any treatment activities, SJW will clearly define the boundaries of the treatment area and protected resources on maps for the project area and with highly-visible flagging or clear, existing landscape demarcations.

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.	Yes	SJW Prior-During	CAL FIRE

As noted in EC-5, “Biological Resources,” treatment activities would be consistent with the Santa Clara County Code, which contains regulations pertaining to tree removal (Section 12.24.090). In addition, treatment activities would comply with Santa Clara County Ordinance (Division C16 Tree Preservation and Removal), which prohibits the clear-cutting of oak woodlands and limits the removal of native trees in the inland area of the unincorporated portions of Santa Clara County. As noted in Section EC-12, “Noise,” treatment activities would take place during daytime hours consistent with the County Noise Ordinance.

SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent would: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types.	No	SJW N/A	CAL FIRE

The proposed project does not include prescribed burning.

SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types.	Yes	SJW During-Post	CAL FIRE

Trash receptacles will not be required on-site. All trash generated will be removed daily. Following completion of treatment activities, all flagging (except for flagging needed to protect sensitive resources for future treatments), trash, debris, and barriers will be removed from the project area.

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.	Yes	SJW Prior	CAL FIRE

One to three days prior to the commencement of a treatment activity, SJW will post signs in a conspicuous location near the project area describing the activity and timing and requesting persons in the area to contact a designated representative.

SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. This SPR applies to all treatment activities and all treatment types.	Yes	SJW Prior-During-Post	CAL FIRE

Information on the proposed treatment project has been submitted to the Board. Once the project is approved and completed, respectively, updated information will be submitted to the Board for online posting on the CalVTP Project Viewer.

SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE would include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period would be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types.	No	SJW N/A	CAL FIRE

This project would be funded by CAL FIRE but would not be implemented by CAL FIRE; therefore, a contract is not necessary for implementation of treatments. This SPR does not apply to the project. However, as landowner, land manager and implementing entity, SJW will access areas post-treatment to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance.

SPR AD-9 Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent would contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. This SPR applies to all treatment activities and all treatment types.	No	SJW N/A	CAL FIRE

References

Ascent. 2022 (December). *Assessment of Biomass Processing Technologies*.

Bay Area Air Quality Management District. 2022. *BAAQMD Thresholds and Guidelines Update*. Bay Area Air Quality Management District Guidelines. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed June 21, 2022,

BAAQMD. *See* Bay Area Air Quality Management District.

Calflora. 2022. Information on Wild California plants. Available: https://www.calflora.org/search.html. Accessed June 2022.

California Consortium of Herbaria 2. 2022. CCH2 data portalhttps://cch2.org/portal/index.php. Accessed June 2022.

California Department of Toxic Substances Control. 2022. EnviroStor Database. Available: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=los+gatos+ca%2C+santaclara+county%2C+ca. Accessed June 21, 2022.

California Department of Transportation. 2022. Scenic Highways. Available: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed: June 9, 2022.

California Department of Fish and Wildlife. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Accessed June 2022.

California Environmental Protection Agency. 2022. Cortese List Database. Available: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf. Accessed June 21, 2022.

California Native Plant Society. 2022. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available: http://www.rareplants.cnps.org. Accessed May 27, 2022.

California Natural Diversity Database. 2022. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed: May 27, 2022.

Churchill, R.K., and Hill, R.L., 2000, A general location guide for ultramafic rocks in California—Areas more likely to contain naturally occurring asbestos: California Department of Conservation, Division of Mines and Geology, DMG Open-File Report 2000-19, 1 plate, scale 1:1,100,000, http://www.conservation.ca.gov/cgs/minerals/hazardous_minerals/asbestos/Pages/Index.aspx.

CCH2. *See* California Consortium of Herbaria 2.

CDFW. *See* California Department of Fish and Wildlife.

CNDDB. *See* California Natural Diversity Database.

CNPS. *See* California Native Plant Society.

DTSC. *See* California Department of Toxic Substances Control.

CalEPA. *See* California Environmental Protection Agency.

Caltrans. *See* California Department of Transportation.

Frederickson, D. A. 1984. *The north coast region.* In M. J. Moratto (Ed.), California Archeology (pp. 471–527). Academic Press, Orlando.

Governor's Office of Planning and Research. 2018 (December). *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed June 21, 2022.

Horizon Water and Environment and Dudek. 2021 (March). Los Gatos Creek Watershed Maintenance Program Manual. HWE 13.011. Oakland, CA. Originally prepared December 2016 for San Jose Water Company. San Jose, CA.

Jepson Flora Project (eds.). 2022. Jepson eFlora, Available: https://ucjeps.berkeley.edu/eflora/. Accessed: June 2022.

Natural Resources Conservation Service. 2022. Soil classification maps. Available: https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/class/maps/. Accessed June 6, 2022.

Norman, S. 2007. *A 500-year record of fire from a humid coast redwood forest*. Save-the Redwoods League. Retrieved April 19, 2022, from http://www.savetheredwoods.org/wp-content/uploads/pdf_norman.pdf.

Noss, R. F. 2000. *The Redwood Forest: History, ecology, and conservation of the Coast Redwoods*. Island Press.

OPR. *See* Governor's Office of Planning and Research.

Penrod, K., P. E. Garding, C. Paulman, P. Beier, S. Weiss, N. Schaefer, R. Branciforte and K. Gaffney. 2013. Critical Linkages: Bay Area & Beyond. Produced by Science & Collaboration for Connected Wildlands, Fair Oaks, CA www.scwildlands.org in collaboration with the Bay Area Open Space Council's Conservation Lands Network www.BayAreaLands.org.

San Mateo County Resource Conservation District. 2021. Santa Clara County Enhanced Lifeform Map, 1:5,000 Scale. Prepared in cooperation with CALFIRE, Santa Clara Mountains Stewardship Network, Midpeninsula Regional Open Space District, County of Santa Clara. Tukman Geospatial LLC. Available: https://www.arcgis.com/home/item.html?id=94835ec8a00b47019def9648819f6f59. Accessed: June 15, 2022.

Santa Clara County. 2009. Santa Clara County SOD (*Phytophthora ramorum*). Available: https://ag.sccgov.org/sites/g/files/exjcpb456/files/sod_webmap_050609.pdf. Accessed June 27, 2022.

Santa Clara County. 2022. Santa Clara County Noise Ordinance Section B-11-152. Available: https://cpd.sccgov.org/sites/g/files/exjcpb706/files/NP_Noise_Ordinance.pdf. Accessed June 21, 2022.

Sillett, S. C., Van Pelt, R., Carroll, A. L., Campbell-Spickler, J., & Antoine, M. E. (2020). Aboveground biomass dynamics and growth efficiency of Sequoia sempervirens forests. Forest Ecology and Management, 458, 117740.

Skovsgaard, J. P. and J. K. Vanclay. 2008. “Forest site productivity: a review of the evolution of dendrometric concepts for even-aged stands.” *Forestry: An International Journal of Forest Research* 81 (1): 13-31. Available: https://doi.org/10.1093/forestry/cpm041. Accessed May 2022.

Sommer, M. L., R. L. Barboza, R. A. Botta, E. B. Kleinfelter, M. E. Schauss and J. R. Thompson. 2007. Habitat Guidelines for Mule Deer: California Woodland Chaparral Ecoregion. Mule Deer Working Group, Western Association of Fish and Wildlife Agencies.

SWRCB. *See* State Water Resources Control Board.

State Water Resources Control Board. 2022. Geotracker Database. Available: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=los+gatos+ca%2C+santaclara+county%2C+ca. Accessed June 21, 2022.

Stephens, S. L. and D. L. Fry. 2005. ”Fire History in the Coast Redwood Stands in the Northeastern Santa Cruz Mountains, California.” *Fire Ecology* 1 (1): 2-19.

U.S. Fish and Wildlife Service. 2022. *National Wetlands Inventory*. Available: https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper. Accessed June 2022.

USFWS. *See* U.S. Fish and Wildlife Service.

Attachment A

Standard Project Requirements and Mitigation Measures Applicable to the Proposed Project

EC-1: AESTHETIC AND VISUAL RESOURCE STANDARD PROJECT REQUIREMENTS

- SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.
- SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- MM AES-3 Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks: The project proponent will conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation

  If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent will, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent will thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to help screen public views and minimize the contrast between the fuel break and surrounding vegetation.

EC-2: AGRICULTURE AND FOREST RESOURCES

- NONE

EC-3: AIR QUALITY STANDARD PROJECT REQUIREMENTS

- SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.

- SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures:
  - Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol.
  - If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations.
  - Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113.
  - Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.

  This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- MM AQ-1 Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques:

  Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible.

  Techniques for reducing emissions may include, but are not limited to, the following:
  - Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment.
    - Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria:

  - meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer;
  - be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables;
  - contain no fatty acids or functionalized fatty acid esters; and
  - have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines.
- Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment.
- Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes.
- Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.

EC-4: ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES STANDARD PROJECT REQUIREMENTS

Cultural resource SPRs and mitigation measures require that qualified individuals implement components of the measures. The requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including supervised designees) as long as they are qualified.

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

Archaeologically Trained Resource Professional: To be qualified, an archaeologically-trained resource professional would hold a valid Archaeological Training Certificate issued by CAL FIRE and the Board or equivalent state or local agency training or certification.

- SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following:
  - A written description of the treatment location and boundaries.
  - Brief narrative of the treatment objectives.
  - A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.
  - A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.
  - A request for information regarding potential impacts to cultural resources from the proposed treatment.
  - A detailed description of the depth of excavation, if ground disturbance is expected.

  In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- SPR CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- MM CUL-2 Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources: If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.

EC-5: BIOLOGICAL RESOURCES STANDARD PROJECT REQUIREMENTS

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

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

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

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

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

  1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:

     a. by physically avoiding the suitable habitat, or

     b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).

     Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.

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

- SPR BIO-2 Require Biological Resource Training for Workers: The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA)

is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SENSITIVE NATURAL COMMUNITIES AND OTHER SENSITIVE HABITATS

- SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:
  - require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website).
  - map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.

  This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:
  - Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.
  - Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.
  - Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
  - Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see *Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service*).
  - Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.

- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.
- Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.
- The project proponent will notify CDFW pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.
- In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.

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

- SPR BIO-5 Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub: The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).

  During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area.

  For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:

  - Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.
  - The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in

the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.

These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.

Additional measures will be applied to ecological restoration treatment types:

- For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.
- Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved.
- A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology.
- If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity.

These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.

A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.

- SPR BIO-6 Prevent Spread of Plant Pathogens: When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):
  - clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk;
  - include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training;
  - minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment;

- minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;
- clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and
- follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for Phytoptheras in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

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

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

INVASIVE PLANTS AND WILDLIFE

- SPR BIO-9 Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife: The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):
  - clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;
  - for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
  - inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;
  - stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;

- identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;
- treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and
- implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version).

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

WILDLIFE

- SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.

  The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed.

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

  Project-Specific Requirements

  - Either surveys for monarch butterfly host plants will be performed prior to implementing treatment activities, or presence of host plants in suitable habitat will be assumed and Mitigation Measure BIO-2e will apply.
  - Either surveys for Crotch bumble bee and western bumble bee will conducted prior to implementing treatment activities, or presence of these species in suitable habitat will be assumed and Mitigation Measure BIO-2g will apply.
  - To avoid impacts on special-status amphibians and reptiles (i.e., California giant salamander, coast range newt, coast horned lizard, Northern California legless lizard, Santa Cruz black salamander, western pond turtle), focused surveys (i.e., visual, walk and turn surveys) will be conducted by a qualified RPF, or biologist, within habitat suitable for the species prior to mechanical and manual treatments.
  - Either protocol level surveys following the *Interim Guidance on Site Assessment and Filed Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* (USFWS and CDFW 2003) will be conducted in potentially suitable habitat within the project area, or presence of California tiger salamander will be assumed in potentially suitable habitat and Mitigation Measure BIO-2a will apply.

- Either protocol level surveys following the *Revised Guidance on Site Assessments and Filed Surveys for California red-legged frog* (USFWS 2005) will be conducted within the project area, or presence of California red-legged frog will be assumed in potentially suitable habitat and Mitigation Measure BIO-2a will apply.
- For all treatment activities that occur during the nesting bird season (February 1–August 31) and to avoid impacts on golden eagle, grasshopper sparrow, loggerhead shrike, long-eared owl, purple martin, and white-tailed kite, focused surveys (i.e., nest searches) for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season.
- For all activities using power equipment that cannot be avoided during the American badger pupping season and to avoid impacts to American badger, focused surveys of dens will be conducted within suitable habitat prior to implementing treatment activities during the pupping season (February 15 – July 1).
- Either focused surveys for ringtail will be conducted within the project area, or presence of ringtail will be assumed in potentially suitable habitat and Mitigation Measure BIO-2 will apply.
- To avoid impacts on San Francisco dusky-footed woodrats, focused surveys for the species would be conducted within habitat suitable for the species prior to implementation of mechanical and manual treatments using power equipment.
- For all treatment activities that cannot be avoided during the bat maternity season and to avoid impacts on pallid bat and Townsend's big-eared bat, focused surveys for maternity roosts will be conducted prior to implementing treatment activities in suitable habitat during the bat maternity season (April 1–August 31).
- For all treatment activities that occur within the mule deer fawning season (May 1 – August 31), focused surveys for fawning sites will be conducted prior to implementing treatment activities.

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

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

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

  - Establish Buffer. The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist.

Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.

- Modify Treatment. The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.
- Defer Treatment. The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.

Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

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

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

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

- MM BIO-1a Avoid Loss of Special-Status Plants Listed under ESA or CESA: If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk,

especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.

For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c.

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

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

- No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.

A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.

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

- **MM BIO-2a Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities):** If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following.

  Avoid Mortality, Injury, or Disturbance of Individuals

  The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:

  1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly accepted science and considering published agency guidance; OR
  2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species.
     - For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c.
     - Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.

Maintain Habitat Function

The project proponent will design treatment activities to maintain the habitat function, by implementing the following:

- While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.
- If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.

A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.

Project Specific Requirements

California Red-Legged Frog

- If the presence of California red-legged frog (CRLF) within suitable habitat in the project area is assumed or if SPR BIO-10 surveys have detected California red-legged frog, SJW will implement the following measures:
- Pre-treatment surveys and biological monitoring. Pre-treatment visual surveys will be performed daily by a qualified RPF, biologist, or biological monitor, prior to implementation of any treatment activities (i.e., mechanical, manual, and herbicide) within 300 feet of Class I or Class II streams and within or adjacent to other sensitive habitat areas (e.g., wet intermittent streams, wet seeps), during the dispersal season (October 1 through April 1) or within 24 hours following a rain event greater than one quarter inch. Surveys and monitoring will be performed year-around prior to any activities within 30 feet of Class I or Class II streams and within or adjacent to other sensitive habitat areas (e.g., wet Class III streams, wet seeps). If a California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless it is determined by the qualified RPF or biologist that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own and the occurrence will be reported to the qualified biologist, and USFWS.
- If California red-legged frog is found during pre-treatment surveys or enters the project site during treatment activities, the specific habitat features used by the frog when detected will be evaluated by a qualified RPF or biologist for habitat retention, if habitat retention will meet the project goals.
- If operators need to move or treat large woody debris greater than 12 inches in diameter, that piece of woody debris will be evaluated for CRLF by a qualified biologist, qualified professional, RPF, RPF supervised designee, or a contractor who has been through the environmental awareness training.

- All mechanized equipment including track chippers will shut down for 24 hours following any precipitation event of 0.20 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches. Handwork may continue.
- No mechanized operations year around (including track chippers unless on an existing road) in a Watercourse and Lake Protection of a Class I or Class II watercourse or within 30 feet of a Class III or adjacent to other potential sensitive habitat areas (e.g., wet seeps). Only handwork may occur in these areas. If handwork is proposed, the area must be cleared by a qualified RPF or biologist no more than 7 days prior to operations.
- No heavy equipment shall be fueled within 65 feet of any watercourse.
- All herbicide use during project implementation will comply with the herbicide use restrictions in the stipulated injunction issued by the Federal District Court for the Northern District of California to resolve the 2006 case brought against the Environmental Protection Agency by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications will be allowed in California red-legged frog habitat under the following conditions.
- Cut stump and basal bark applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat.

California Tiger Salamnder

- If the presence of California tiger salamander within suitable upland habitat (defined as oak woodland and grasslands within 1.3 mile of suitable aquatic habitat) in the project area is assumed or if SPR BIO-10 surveys have detected California tiger salamander, SJW will implement the following measures:
- To avoid mortality, injury, or disturbance to California tiger salamander, no project treatments will occur in treatment units where presence is documented or assumed during the rainy season (breeding season for California tiger salamander) between October 15 and April 15.
- Only manual treatments will be permitted within treatment units where where presence of California tiger salamander is documented or assumed. No mechanical or herbicide treatments are permitted.
- Daily inspection of the day's treatment area within suitable habitat will be performed by the qualified biologist, qualified RPF, or supervised trained designee. Prior to implementation of daily inspections, the qualified biologist will conduct a training for other project staff (i.e., qualified RPF or supervised trained designee). The training will include: identification of California tiger salamander, procedures to follow for daily inspection of appropriate habitat features immediately before treatment occurs, and proper procedures to implement if a California tiger salamander is present (e.g., establish a no-disturbance buffer zone of a size that will appropriately avoid California red-legged frog where treatment will not occur until the salamander has left the area, halt activities if a California tiger salamander is observed during treatment, allow California tiger salamanders to move out of the treatment area on their own accord, notify CDFW and USFWS if California tiger salamanders are observed).

Foothill Yellow-Legged Frog

- In treatment areas within 200 feet of Class I and Class II watercourses, the habitat suitability for foothill yellow-legged frog will be assessed. If no suitable habitat for foothill yellow-legged frog is found within the treatment area, then no further actions are required. If suitable habitat is present within the treatment area daily inspections will be required.
- Daily inspection of the day's treatment area within suitable habitat will be performed by the qualified biologist, qualified RPF, or supervised trained designee. Prior to implementation of daily inspections, the qualified biologist will conduct a training for other project staff (i.e., qualified RPF or supervised trained designee). The training will include: identification of foothill-legged frog, procedures to follow for daily inspection of appropriate habitat features immediately before treatment occurs, and proper procedures to implement if a frog is present (e.g., establish a no-disturbance buffer zone of a size that will appropriately

avoid foothill yellow-legged frog where treatment will not occur until the frog has left the area, halt activities if a foothill yellow-legged frog is observed during treatment, allow foothill yellow-legged frogs to move out of the treatment area on their own accord, notify CDFW if foothill yellow-legged frogs are observed).

White-Tailed Kite

- If active white-tailed kite nests are found during SPR BIO-10 surveys, a no-disturbance nest buffer of 0.25 mile would be placed around active white-tailed kite nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF. The buffer distance may be modified by a qualified RPF or biologist based on presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, and expected treatment activities.

Golden Eagle

- If active golden eagle nests are found during SPR BIO-10 surveys, a no-disturbance nest buffer of 1.0 mile would be placed around active golden eagle nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF. The buffer distance may be modified by a qualified RPF or biologist based on presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, and expected treatment activities.

Ringtail

- To avoid mortality or injury to ringtail the following will be implemented when mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws) are implemented during the maternity season (April 15–June 30).
- Within 7 days prior to the start of mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws) during the ringtail maternity season, a qualified RPF or biologist will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biologist will search for den structures, such as hollow logs, rock piles, and large trees (i.e., greater than 12 inches dbh) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified biologist or RPF will inspect the cavity using a cell phone with a flash, or other tools (e.g., borescopes) to determine whether ringtails are present if safely accessible. Areas (e.g., large trees) with appropriate den habitat, whether verified as occupied or not, will be marked (i.e., with flagging, spray paint), for inspection during future sweeps (as described below), and for potential avoidance during the maternity season. The qualified RPF or biologist will also search for dens in dense brush habitat and will note any sightings of fleeing adult ringtails.
- If active ringtail dens are not discovered during a den survey, the following daily sweeps will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search as well as injury or mortality of adult ringtails and kits. On the first morning of work for mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws), a qualified RPF or biologist will conduct a sweep of the area to be treated that week and will search all habitat suitable for ringtails where mastication or tree removal will occur that day (i.e., larger trees, heavy brush, rock piles) for active dens or adults, including the trees with cavities previously marked by the qualified RPF or biologist if safely accessible. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens.
- If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and the requirements described below under "Active Dens" will be followed. Any potential den structures, where the biologist, RPF, or trained contractor is not able to determine if the structure is occupied or not, due to safety or access issues, will be retained until the end of the ringtail maternity season (June 30).

- Active Dens. If active ringtail dens are discovered during a den survey or daily sweep, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws) will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer would incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer.

Mountain lion

- To avoid mortality or injury to mountain lion the following will be implemented.
- Nursery habitat suitable for the species will be determined through desktop analyses (e.g., review of land cover, slope, distance from development), coordination with local experts studying or tracking the species (if available), and field surveys. Potential mountain lion dens will include caves, large natural cavities within rocky areas, or thickets deemed appropriate for use by mountain lions based on size and other characteristics (e.g., proximity to human development, surrounding habitat). The qualified wildlife biologist will use publicly available data on mountain lion sightings, or survey for signs of mountain lion (e.g., tracks, scat, prey items such as a fresh kill) in the vicinity of potential nursery habitat to help determine whether the area may contain a mountain lion nursery. If nursery habitat is confirmed within the treatment area, the following additional measures will be applied. If nursery habitat is not identified within the treatment area, no additional measures will be required.
- Within 7 days prior to the start of mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws), a qualified RPF or biologist will inspect suitable nursery habitat in the part of the treatment area scheduled to be treated the following week for mountain lion or signs of mountain lion nurseries. If no mountain lion or sign of a nursery is observed, treatment activities may begin. If signs of a mountain lion nursery are observed, further investigation will be required to determine if a mountain lion nursery is present (see below).
- If signs of a mountain lion nursery are found during surveys, further investigation will be required to determine if a mountain lion nursery is present. No treatment will occur in the area while further investigation is occurring. Survey methods will include the use of trail cameras, track plates, hair snares, and/or other noninvasive methods, as well as coordination with local experts tracking the species (if available). Surveys using these noninvasive methods will be conducted for three days and three nights to determine whether a nursery may be present.
- If a nursery is known to occur in the area or further signs of a nursery are detected based on the surveys described above (e.g., lactating adult females or cubs on camera, repeated detections of an adult female in the area, growls or calls from cubs), SJW will implement a no-disturbance buffer of at least 2,000 feet (Wilmers et al. 2013) for a minimum of 10 weeks. Treatment activities will not occur within this buffer during this time to avoid disturbance, injury, or mortality of mountain lion nurseries.

- MM BIO-2b Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities): If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following.

Avoid Mortality, Injury, or Disturbance of Individuals

The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:

- For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).
- No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician may will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment if the treatment activity has the potential to result in mortality, injury, or disturbance. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.
- For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.

Maintain Habitat Function

For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following:

- While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.
- If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are

present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained.

- A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function.

A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.

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

Project Specific Requirements

Special-Status Amphibians and Reptiles

- If special-status amphibians and reptiles (i.e., California giant salamander, coast range newt, coast horned lizard, Northern California legless lizard, Santa Cruz black salamander, western pond turtle) are detected during SPR BIO-10 focused surveys, biological monitoring by a qualified RPF or biologist during mechanical and manual treatment activities within or adjacent to sensitive habitat areas will be implemented to avoid injury to or mortality of individual special-status amphibians and reptiles. If the qualified RPF or biologist detects a special-status amphibian or reptile during treatments, a non-disturbance buffer of 100 feet, or published agency distance, will be implemented around the individual unless it is determined by a qualified RPF, biologist, or RPF supervised designee that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal has left the area or has been moved out of harm's way and to other nearby habitat suitable for the species by the qualified RPF or biologist.

Special-Status Birds

- If an active grasshopper sparrow, loggerhead shrike, long-eared owl, or purple martin nest is detected during SPR BIO-10 focused surveys, a no-disturbance buffer of at least 100 feet will be established around the nest, and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. The buffer distance may be modified by a qualified RPF or biologist based on presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels

of noise and human activity, and expected treatment activities. If purple martin nests are detected, the nesting tree or snag will be avoided and left intact by treatment activities.

Special-Status Bats

- If a special-status bat roost is detected during SPR BIO-10 focused surveys, a no-disturbance buffer of 250 feet will be established around the roost during the bat maternity season (April 1–August 31), and no treatment activities will occur within this buffer until the roost is no longer being used as determined by a qualified RPF or biologist. The buffer distance may be modified by a qualified RPF or biologist based on presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, and expected treatment activities.

American Badger

- If an American badger den is detected within treatment areas during SPR BIO-10 focused surveys, a no-disturbance buffer of 100 feet would be established around active maternity dens, and treatments would not occur within this buffer during the pupping season (February 15 – July 1).

San Francisco Dusky-Footed Woodrat

- Woodrat nests will be given a buffer of no between 5 feet and 10 feet where feasible.
- If San Francisco Dusky-Footed Woodrat nests within treatment areas cannot be avoided, a qualified biologist or RPF, will implement nest relocation procedures outside of the woodrat breeding season (April through mid-July). The biologist or RPF would dismantle the woodrat nest by hand, and rebuild the nest outside of the treatment footprint. Rebuilt nests will be located in the vicinity (approximately 50 feet) of other existing nests (when other nests occur outside of the treatment area), and in the same habitat type as the original nest when feasible.

- Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities): If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures will be implemented:
  - Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34).
  - Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants.
  - Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type will not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore.
  - Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year.
  - Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained.
  - If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.

CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult

with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.

Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.

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

Project Specific Requirements

Monarch Butterfly

- Physically avoid the area occupied by monarch butterfly hostplants, milkweed (*Asclepias* spp.). by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 10 feet from milkweed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to milkweed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the milkweed's 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.
- Design treatments to maintain habitat function for milkweed, thereby maintaining habitat function for monarch butterflies.

- Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible:
  - Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season.

- Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area.
- Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area).
- Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September).

CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.

Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.

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

- MM BIO-3a Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands: The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:
  - Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.

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

The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after

implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.

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

- MM BIO-3b Compensate for Loss of Sensitive Natural Communities and Oak Woodlands: If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions:
  - Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by:
    - restoring sensitive natural community or oak woodland functions and acreage within the treatment area;
    - restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or
    - preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function.
  - The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:
    1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity.
    2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.

  The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.

- MM BIO-4 Avoid State and Federally Protected Wetlands: Impacts to wetlands will be avoided using the following measures:
  - The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented.

- The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).
- A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented.
- A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.
- Within this buffer, herbicide application is prohibited.
- Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging.
- Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:
- No special-status species are present in the wetland habitat
- The wetland habitat function would be maintained.
- The prescribed burn is within the normal fire return interval for the wetland vegetation types present
- Fire containment lines and pile burning are prohibited within the buffer.
- No fire ignition (and associated use of accelerants) will occur within the wetland buffer.

- MM BIO-5 Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites: The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10:
  - Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment.
  - Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.
- Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat: If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:
  - Compensate for unavoidable losses of riparian habitat acreage and function by:
    - restoring riparian habitat functions and acreage within the treatment area;

- restoring degraded riparian habitat outside of the treatment area;
- purchasing riparian habitat credits at a CDFW-approved mitigation bank; or
- preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value.

- The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:

  1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.
  2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.

The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.

EC-6: GEOLOGY, SOILS, AND MINERAL RESOURCE STANDARD PROJECT REQUIREMENTS

- SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.

  Project Specific Requirements

  - The project proponent will suspend mechanized operations to prevent treatment activity from occurring during heavy precipitation if the National Weather Service forecast is a "chance" (30 percent or more averaged over each hour) of rain within the next 12 hours where mechanized operations are proposed from 6:00 am – 6:00 pm for that days operation.

- SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to

avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

- SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.
- SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.
- SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.
- SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will:

  (1) Prohibit use of heavy equipment where any of the following conditions are present:

  (i) Slopes steeper than 65 percent.

  (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.

  (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.

  (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to:

  (i) Existing tractor roads that do not require reconstruction, or

  (ii) New tractor roads flagged by the project proponent prior to the treatment activity.

  (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope.

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

- SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.

EC-7: GREENHOUSE GAS EMISSIONS STANDARD PROJECT REQUIREMENTS

- NONE

EC-8: ENERGY

- NONE

EC-9: HAZARDOUS MATERIAL AND PUBLIC HEALTH AND SAFETY STANDARD PROJECT REQUIREMENTS

- SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to):
  - a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;

- a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;
- procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.

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

- SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following:
  - Be implemented consistent with recommendations prepared annually by a licensed PCA.
  - Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions.
  - Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation.
  - Be applied by an applicator appropriately licensed by the State.

  This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.
- SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations.

  This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.
- SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases.

  This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.
- MM HAZ-3 Identify and Avoid Known Hazardous Waste Sites: Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.

EC-10: HYDROLOGY AND WATER QUALITY STANDARD PROJECT REQUIREMENTS

- **SPR HYD-1 Comply with Water Quality Regulations:** Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR HYD-2 Avoid Construction of New Roads:** The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:** The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) Widths[1]

Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.
< 30 % Slope	75	50	[2]	[2]
30-50 % Slope	100	75	[2]	[2]
>50 % Slope	150	100	[2]	[2]

[1] WLPZ width (ft) – distance from top of bank to the edge of the protection zone.

[2] Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.

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

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced, a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).
- Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.
- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.
- WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.
- Burn piles will be located outside of WLPZs.
- No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.
- Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.

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

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

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

- SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicides:
  - Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway.
  - Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.

- No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA.
- No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools.
- For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray.
- Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative);
- No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.

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

- SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and ensure that restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

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

- NONE

EC-12: NOISE STANDARD PROJECT REQUIREMENTS

- SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.

- SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.
- SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

EC-13: RECREATION STANDARD PROJECT REQUIREMENTS

- NONE

EC-14: TRANSPORTATION STANDARD PROJECT REQUIREMENTS

- SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

  Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.

EC-15: PUBLIC SERVICES AND UTILITIES STANDARD PROJECT REQUIREMENTS

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

EC-16: WILDFIRE

- NONE

EC-17: ADMINISTRATIVE STANDARD PROJECT REQUIREMENTS

- SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns.

This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.

- SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism.

  Information on proposed projects (PSA in progress):

  - GIS data that include project location (as a point);
  - project size (typically acres);
  - treatment types and activities; and
  - contact information for a representative of the project proponent.

  Information on approved projects (PSA complete):

  - A completed PSA Environmental Checklist;
  - A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);
  - GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction)

  Information on completed projects:

  - GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction)
  - A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes
    - Size of treated area (typically acres);
    - Treatment types and activities;
    - Dates of work;
    - A list of the SPRs and mitigation measures that were implemented
    - Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b).

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

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Attachment B

Biological Resources

VEGETATION AND HABITAT

The project area is located within the Central California Coast ecoregion. The Pacific Vegetation Map fine scale GIS mapping data for Santa Clara County was used, then cross-referenced with and converted to CAL FIRE's Fire and Resource Assessment Program (FRAP) vegetation layer (Pacific Veg Map 2022; CAL FIRE 2017). The FRAP vegetation layer was then used to identify the California Wildlife Habitat Relationship (CWHR) habitat and vegetation types within the project area. Vegetation types within the project area are blue oak woodland, blue oak-foothill pine woodland, closed-cone pine-cypress, coastal oak woodland, Douglas fir, eucalyptus, montane hardwood, montane hardwood-conifer, montane riparian, redwood, valley foothill riparian, chamise chaparral, coastal scrub, mixed chaparral, annual grassland, and lacustrine (seasonal ponds) habitats. The CWHR classifications were cross-referenced to *Manual of California Vegetation (MCV)* (CNPS 2022a) alliances to identify sensitive natural communities that may occur within each CWHR type in this ecoregion. California Department of Fish and Wildlife's Natural Communities list was also utilized (CDFW 2022). Table B-1 lists the acreage and relative abundance of each CWHR habitat type in the project area, the corresponding MCV alliances that may be found in each CWHR type, and the alliances that are designated sensitive natural communities or that are dominated by nonnative species. The U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory GIS dataset and the National Hydrography Dataset were used to identify previously mapped wetland and aquatic habitats within the project area. Nomad Ecology conducted protocol level surveys for rare plants and sensitive natural communities pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). Protocol level surveys were conducted in a section of the project area and identified six sensitive natural communities (Bartosh, pers. comm., 2022). Alliances shown in **bold** font in Table B-1 are sensitive natural communities that are known to occur in the project area.

Table B-1 Vegetation and Habitat Types within the San Jose Water Company Forest Health Program – P1 Project area

CWHR Classification	Acres	Percent of Project area	MCV Alliances
Woodland and Forest Habitats			
Blue Oak Woodland	1.33	0.07	Blue oak woodland Interior live oak woodland
Blue Oak-Foothill Pine	4.19	0.22	Blue oak woodland Foothill pine woodland
Closed-Cone Pine-Cypress	67.10	3.44	Knobcone pine forest Bishop pine – Monterey pine forest[3]
Coastal Oak Woodland	341.46	17.53	**Madrone forest**[1] Coast live oak woodland Mixed oak forest Shreve oak forest[1] **California bay forest**[1] California bay and canyon live oak forest[1] California bay and coast live oak forest [1] Tanoak – California bay forest[1]
Douglas Fir	612.60	31.45	Bigleaf maple forest[1] Douglas fir forest Douglas fir - tanoak forest[1] Douglas fir – coast live oak forest and woodland[1] Douglas fir and giant chinquapin[1]
Eucalyptus	3.95	0.2	Eucalyptus - tree of heaven - black locust groves

CWHR Classification	Acres	Percent of Project area	MCV Alliances
Montane Hardwood	0.02	0.0008	Bigleaf maple forest[1] California buckeye grove[1] Tanoak forest[1] Mixed oak forest Canyon live oak forest Interior live oak woodland White alder grove
Montane Hardwood-Conifer	99.24	5.09	Bigleaf maple forest[1] White alder grove
Montane Riparian	3.81	0.2	White alder grove Torrent sedge patch[1] Fremont cottonwood forest[1] Black cottonwood forest[1] Sandbar willow thicket Red osier thickets[1] Hazelnut scrub[1] Sitka willow thickets[1] Thimbleberry Brambles[1]
Redwood	62.62	3.21	Redwood forest[1] Redwood – tanoak – huckleberry forest[1]
Valley Foothill Riparian	42.54	2.18	Box-elder forest[1] Torrent sedge patch[1] California sycamore woodland[1] California sycamore - coast live oak riparian woodlands[1] Fremont cottonwood forest[1] Black cottonwood forest[1] Himalayan blackberry - rattlebox - edible fig riparian scrub[2] Sandbar willow thicket Red willow thicket[1] Shining willow groves[1] Pepper tree or Myoporum grove[2] Red willow riparian Woodland and forest[1] Arroyo willow – red willow riparian woodland[1] Hazelnut scrub[1] Sitka willow thickets[1] Arroyo willow[1]
Chaparral and Scrub Habitats			
Chamise Chaparral	533.58	27.39	Chamise chaparral Chamise - black sage chaparral Eastwood manzanita chaparral Wedge leaf ceanothus chaparral/Buck brush chaparral Blue blossom chaparral Serpentine chamise chaparral[1] Bigberry manzanita chaparral

CWHR Classification	Acres	Percent of Project area	MCV Alliances
Coastal Scrub	12.33	0.63	California sagebrush scrub Coyote brush scrub Hazelnut scrub[1] Live-forever - lichen/moss sparse herbaceous rock outcrop California coffee berry scrub[1] Deer weed scrub Silver bush lupine scrub Ice plant mats[2] Coast range stonecrop draperies Poison oak scrub Salmonberry Bush monkeyflower scrub[1] Coyote brush – ocean spray scrub[1]
Mixed Chaparral	95.33	4.89	Hoary manzanita chaparral[1] Brittle leaf - woolly leaf manzanita chaparral[1] Eastwood manzanita chaparral Glossy leaf manzanita chaparral[1] Silverleaf manzanita chaparral[1] Wedge leaf ceanothus chaparral, Buck brush chaparral Hairy leaf ceanothus chaparral[1] Birch leaf mountain mahogany chaparral Golden chinquapin thickets[1] California coffee berry scrub[1] Ocean spray brush[1] Deer weed scrub Silver bush lupine scrub Holly leaf cherry - toyon - greenbark ceanothus chaparral Scrub oak chaparral Scrub oak - chamise chaparral Leather oak chaparral Interior live oak chaparral Poison oak scrub Brittle leaf manzanita chaparral[1] Hairy leaf - woolly leaf ceanothus chaparral[1]Serpentine chamise chaparral[1] Wart leaf ceanothus chaparral[1]

CWHR Classification	Acres	Percent of Project area	MCV Alliances
Herbaceous Habitats			
Annual Grassland	9.01	0.46	Fiddleneck - phacelia field Wild oat grassland[2] Upland mustard and other ruderal forbs[2] Annual brome grassland2 Red brome or mediterranean grass grassland[2] Cheatgrass - medusahead grassland[2] Annual dogtail grassland[2] Squirreltail patch[1] California goldfields - dwarf plantain - small fescue flower fields Perennial rye grass field[2] Spanish clover field Yellow star-thistle field[2] Popcorn flower field
Aquatic Habitats			
Lacustrine	12.32	0.6	N/A
Other			
Barren	13.46	0.69	N/A
Urban	33.01	1.69	N/A
Total	**1,947.89**		

[1] These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

[2] These alliances are dominated by nonnative vegetation.

[3] These alliances have no indigenous populations that would occur in the PSA area, only waifs or planted stands.

National Wetlands Inventory	Acres	Percent of Project area	MCV Alliances
Aquatic Habitats			
Freshwater Emergent Wetlands	0.52	0.03	N/A
Freshwater Forested/Shrub Wetland	4.06	0.2	N/A
Freshwater Pond	0.37	0.02	N/A
Lake	2.16	0.1	N/A
Other	0.39	0.01	N/A
Riverine	4.97	0.3	N/A

Source: CAL FIRE 2017, CNPS 2022a, USFWS 2022.

SPECIAL-STATUS SPECIES

Table B-2 of this attachment presents special-status plant and wildlife species that are known to occur in the project region, which includes the following U.S. Geological Survey 7.5' quadrangles surrounding the project area: Loma Prieta, Laurel, Felton, Castle Rock Ridge, Los Gatos, Santa Teresa Hills, Watsonville East, Watsonville West, Soquel, Santa Cruz, Davenport, Big Basin, Mindego Hill, Cupertino, San Jose East, San Jose West, Lick Observatory, Morgan Hill, and Mt. Madonna. The table was developed through a review of the CalVTP, relevant databases and other available information, per SPR BIO-1. Data reviewed included the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records (CNDDB 2022a; CNPS 2022b), Consortium of California of Herbaria (CCH2 2022), Jepson eFlora (Jepson Flora Project 2022) , and Calflora (Calflora 2022). The table also includes an assessment of species potential to occur in the project area, and summaries of the potential impacts from the project on each special-status plant and wildlife species.

Table B-2 Special-Status Plant Species Known to Occur in the Project Region and their Potential for Occurrence in the Project Area

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Blasdale's bent grass *Agrostis blasdalei*	-	-	1B.2	Coastal dunes, coastal bluff scrub, coastal prairie. Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 16–1198 feet in elevation. Blooms May–July. Geophyte.	*Not expected to occur*. Project area does not contain coastal dunes, coastal bluff scrub, or coastal prairie habitat potentially suitable for this species. No impact is anticipated.
Bent-flowered fiddleneck *Amsinckia lunaris*	-	-	1B.2	Cismontane woodland, valley and foothill grassland, coastal bluff scrub. Gravelly slopes, grassland, openings in woodland, often serpentine. 10–2608 feet in elevation. Blooms March–June. Annual.	*Could occur*. Woodland and valley and foothill grassland with serpentine soils potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Amsinckia lunaris*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Anderson's manzanita *Arctostaphylos andersonii*	-	-	1B.2	Broadleaved upland forest, chaparral, north coast coniferous forest. Open sites, redwood forest. 197–2493 feet in elevation. Blooms November–May. Perennial.	***Known to occur***. Redwood forest habitat is suitable for this species. This species has historical occurrences from 1889 and 1896 towards the middle of the project area (CCH2 2022). Treatments could result in direct or indirect adverse effects on *Arctostaphylos andersonii*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Schreiber's manzanita Arctostaphylos glutinosa	-	-	1B.2	Closed-cone coniferous forest, chaparral. Mudstone or diatomaceous shale outcrops; often with Pinus attenuata. 550-1910 feet in elevation. Blooms Mar–Apr (Nov). Perennial.	*Not expected to occur*. Project area is not within the range of this species. *Arctostaphylos glutinosa* is endemic to Big Basin and Davenport area in Santa Cruz County. No impact is anticipated.
Hooker's manzanita *Arctostaphylos hookeri* ssp. *hookeri*	-	-	1B.2	Chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland. Sandy soils, sandy shales, sandstone outcrops. 197–1755 feet in elevation. Blooms January–June. Perennial.	*Not expected to occur*. Project area is not within the range of this species. *Arctostaphylos hookeri* ssp. *hookeri* is endemic to Santa Cruz and Monterey Counties. No impact is anticipated.
Ohlone manzanita *Arctostaphylos ohloneana*	-	-	1B.1	Coastal scrub, closed cone coniferous forests. Monterey shale. 1476–1739 feet in elevation. Blooms February–March. Perennial.	*Not expected to occur*. Project area is not within the range of this species. *Arctostaphylos glutinosa* is endemic to Big Basin and Davenport area in Santa Cruz County. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Pajaro manzanita *Arctostaphylos pajaroensis*	-	-	1B.1	Chaparral. Sandy soils, sandstone outcrops. 90–510 feet in elevation. Blooms December–March. Perennial.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.
Kings Mountain manzanita *Arctostaphylos regismontana*	-	-	1B.2	Broadleaved upland forest, chaparral, north coast coniferous forest. Granitic or sandstone outcrops. 780–2320 feet in elevation. Blooms December–April. Perennial.	*Could occur*. Broadleaved upland forest, chaparral, north coast coniferous forest with sandstone outcrop habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Arctostaphylos regismontana*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Bonny Doon manzanita *Arctostaphylos silvicola*	-	-	1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest. Weathered sandstone soils in chaparral, conifer forest. 492–1706 feet in elevation. Blooms January–March. Perennial.	***Known to occur***. Chaparral and coniferous forest with sandstone soil habitat potentially suitable for this species is present in the project area. This species has a historical occurrence from 1895 towards the middle of the project area (CCH2 2022). It is unknown if this occurrence is extant. Treatments could result in direct or indirect adverse effects on *Arctostaphylos silvicola*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Marsh sandwort *Arenaria paludicola*	FE	SE	1B.1	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 10–558 feet in elevation. Blooms May–August. Perennial.	*Not expected to occur*. Project area is not within the range of this species. This species is highly restricted to coastal environments west of the Santa Cruz Mountain crest in this part of the species range. No impact is anticipated.
Humboldt milk-vetch *Astragalus agnicidus*	-	SE	1B.1	Broadleafed upland forest, north coast coniferous forest. Disturbed openings in partially timbered forest lands; also along ridgelines; south aspects. 525–2198 feet in elevation. Blooms April–September. Perennial.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.
Big-scale balsamroot *Balsamorhiza macrolepis*	-	-	1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Often on serpentine. 115–4806 feet in elevation. Blooms March–June. Perennial.	*Could occur*. Chaparral, valley and foothill grassland, and cismontane woodland with serpentine and non-serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Balsamorhiza macrolepis*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Santa Cruz Mountains pussypaws *Calyptridium parryi* var. *hesseae*	-	-	1B.1	Chaparral, cismontane woodland. Sandy or gravelly openings. 1000-5020 feet in elevation. Blooms May–August. Annual.	*Could occur*. Chaparral and woodland with sandy soil habitat potentially suitable for this species is present in the project area. However, this species is a presumed pyrophte and is not likely to occur in absence of burned conditions. Treatments could result in direct or indirect adverse effects on *Calyptridium parryi* var. *hesseae*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Swamp harebell *Campanula californica*	-	-	1B.2	Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, freshwater marsh, north coast coniferous forest. Bogs and marshes in a variety of habitats; uncommon where it occurs. 3–1329 feet in elevation. Blooms June–October. Geophyte.	*Not expected to occur*. Project area is not within the range of this species. The project area is well south of the species current known range. It is not likely to occur east of the Santa Cruz Mountain crest. No impact is anticipated.
Chaparral harebell *Campanula exigua*	-	-	1B.2	Chaparral. Rocky sites, usually on serpentine in chaparral. 902–4101 feet in elevation. Blooms May–June. Annual.	*Not expected to occur*. Project area is not within the range of this species. This species is endemic to the Diablo Range. No impact is anticipated.
Bristly sedge *Carex comosa*	-	-	2B.1	Lake margins, wet places; site below sea level is on a Delta island. -16–5315 feet in elevation. Blooms May–September. Geophyte.	*Not expected to occur*. Project area is not within the range of this species. This species is highly restricted to coastal environments west of the Santa Cruz Mountain crest in this part of its range. No impact is anticipated.
Deceiving sedge *Carex saliniformis*	-	-	1B.2	Marshes, pond shores, wet openings. Mesic sites. 10–755 feet in elevation. Blooms June (July). Geophyte.	*Not expected to occur*. Project area is not within the range of this species. This species is highly restricted to coastal environments west of the Santa Cruz Mountain crest in this part of its range. No impact is anticipated.
Tiburon paintbrush *Castilleja affinis* var. *neglecta*	FE	ST	1B.2	Valley and foothill grassland. Rocky serpentine sites. 394–1312 feet in elevation. Blooms April–June. Perennial.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Pink creamsacs *Castilleja rubicundula* var. *Rubicundula*	-	-	1B.2	Chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Openings in chaparral or grasslands. On serpentine. 66–3002 feet in elevation. Blooms April–June. Annual.	*Could occur*. Chaparral and valley and foothill grassland habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Castilleja rubicundula* var. *rubicundula*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Coyote ceanothus *Ceanothus ferrisiae*	FE	-	1B.1	Chaparral, valley and foothill grassland, coastal scrub. Rocky, serpentine slopes, chaparral. 492–1509 feet in elevation. Blooms January–May. Perennial.	*Could occur*. Chaparral and valley and foothill grassland habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Ceanothus ferrisiae*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	-	-	1B.1	Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. 0–755 feet in elevation. Blooms May–October (November). Annual.	*Not expected to occur*. Project area does not contain grassland with alkaline soil habitat potentially suitable for this species. No impact is anticipated.
Dwarf soaproot *Chlorogalum pomeridianum* var. *minus*	-	-	1B.2	Chaparral. Serpentine. 1001–3281 feet in elevation. Blooms May–August. Geophyte.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.
Ben Lomond spineflower *Chorizanthe pungens* var. *hartwegiana*	FE	-	1B.1	Lower montane coniferous forest. Sand. 344–1558 feet in elevation. Blooms April–July. Annual.	*Could occur*. Coniferous forest with sandy soil habitat potentially suitable for this species is present in the project area. This species has a documented occurrence from 1907 towards the middle of the project area 0.1 miles west of part of the project area and 0.3 miles south of Lexington Reservoir (CCH2 2022). Treatments could result in direct or indirect adverse effects on *Chorizanthe pungens* var. *hartwegiana*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inch), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Monterey spineflower *Chorizanthe pungens* var. *pungens*	FT	-	1B.2	Coastal dunes, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Sandy soils in coastal dunes. 0–558 feet in elevation. Blooms April–June (July),(August). Annual.	*Not expected to occur*. Project area is not within the range of this species. This species is endemic to Santa Cruz County. No impact is anticipated.
Scotts Valley spineflower *Chorizanthe robusta* var. *hartwegii*	FE	-	1B.1	Meadows, valley and foothill grassland. In grasslands with mudstone and sandstone outcrops. 344–804 feet in elevation. Blooms April–July. Annual.	*Not expected to occur*. Project area is not within the range of this species. *Chorizanthe robusta* var. *hartwegii* is endemic to Santa Cruz County. No impact is anticipated.
Robust spineflower *Chorizanthe robusta* var. *robusta*	FE	-	1B.1	Cismontane woodland, coastal dunes, coastal scrub, chaparral. Sandy terraces and bluffs or in loose sand. 30–804 feet in elevation. Blooms April–September. Annual.	*Not expected to occur*. Project area is not within the range of this species. This species does not occur east of the Santa Cruz Mountains crest. No impact is anticipated.
Mt. Hamilton fountain thistle *Cirsium fontinale* var. *campylon*	-	-	1B.2	Cismontane woodland, chaparral, valley and foothill grassland. Serpentine seeps and streams. 328–2920 feet in elevation. Blooms (February), April–October. Perennial.	*Could occur*. Stream with serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Cirsium fontinale* var. *campylon*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
San Francisco coiliansia *Collinsia multicolor*	-	-	1B.2	Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus; sometimes on serpentine. 98–820 feet in elevation. Blooms (February), March–May. Annual.	*Could occur*. Coniferous forest with mudstone and serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Collinsia multicolor*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Tear drop moss *Dacryophyllum falcifolium*	-	-	1B.3	North Coast coniferous forest. Limestone substrates and rock outcrops. 164–902 feet in elevation. Blooms Perennial.	*Not expected to occur*. Project area is not within the range of this species. *Dacryophyllum falcifolium* is endemic to Santa Cruz and Monterey Counties. No impact is anticipated.
Western leatherwood *Dirca occidentalis*	-	-	1B.2	On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. 82–1394 feet in elevation. Blooms January–March (April). Perennial.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Santa Clara Valley dudleya *Dudleya abramsii* ssp. *Setchellii*	FE	-	1B.1	On rocky serpentine outcrops and on rocks within grassland or woodland. 197–1493 feet in elevation. Blooms April–October. Perennial.	*Could occur*. Grassland and woodland with serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Dudleya abramsii* ssp. *setchellii*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Ben Lomond buckwheat *Eriogonum nudum* var. *decurrens*	-	-	1B.1	Chaparral, cismontane woodland, lower montane coniferous forest. Sand. 164–2625 feet in elevation. Blooms June–October. Perennial.	*Not expected to occur* Project area is not within the range of this species. This species has not been recorded in Santa Clara County. No impact is anticipated.
San Mateo woolly sunflower *Eriophyllum latilobum*	FE	SE	1B.1	Cismontane woodland, coastal scrub, lower montane coniferous forest. Often on roadcuts; found on and off of serpentine. 98–2001 feet in elevation. Blooms May–June. Perennial.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.
Hoover's button-celery *Eryngium aristulatum* var. *hooveri*	-	-	1B.1	Alkaline depressions, vernal pools, roadside ditches and other wet places near the coast. 3–164 feet in elevation. Blooms (June), Jul (August). Annual/Perennial.	*Not expected to occur*. Project area is not within the range of this species. This species has not been recorded in the Santa Cruz Mountains. No impact is anticipated.
Sand-loving wallflower *Erysimum ammophilum*	-	-	1B.2	Coastal dunes. Sandy openings. 0–197 feet in elevation. Blooms February–June. Perennial.	*Not expected to occur*. Project area does not contain coastal dune habitat potentially suitable for this species. No impact is anticipated.
Santa Cruz wallflower *Erysimum teretifolium*	FE	SE	1B.1	Lower montane coniferous forest, chaparral. Sandy areas in coastal-sage scrub or chaparral. 591–1690 feet in elevation. Blooms March–July. Perennial.	*Not expected to occur*. Project area is not within the range of this species. This species has never been reported from Santa Clara County or east of the Santa Cruz Mountain crest. No impact is anticipated.
Minute pocket moss *Fissidens pauperculus*	-	-	1B.2	Redwood. North coast coniferous forest. Moss growing on damp soil along the coast as well as in dry streambeds and on stream banks. 33–3360 feet in elevation. Blooms Perennial.	*Could occur*. Coniferous forest with streambank habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Fissidens pauperculus*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Fragrant fritillary *Fritillaria liliacea*	-	-	1B.2	Coastal scrub, valley and foothill grassland, coastal prairie, cismontane woodland. Often on serpentine; various soils reported though usually on clay, in grassland. 10–1312 feet in elevation. Blooms February–April. Geophyte.	*Could occur*. Grassland with clay soil and grassland with serpentine habitat potentially suitable for this species are both present in the project area. Treatments could result in direct or indirect adverse effects on *Fritillaria liliacea*. However, this species is a geophyte. Impacts on this species would be avoided by implementing non-ground-disturbing treatment activities during the dormant season (i.e., when the plant has no aboveground parts), generally in the winter. Ground-disturbing treatment activities may result in impacts to this species even when dormant. If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, or if ground-disturbing treatment activities are proposed in potential habitat for this species, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found
Woolly-headed gilia *Gilia capitata* ssp. *tomentosa*	-	-	1B.1	Coastal bluff scrub, valley and foothill grassland. Rocky outcrops on the coast, serpentine. 66–410 feet in elevation. Blooms May–July. Annual.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.
Monterey 11ilia *Gilia tenuiflora* ssp. *arenaria*	FE	ST	1B.2	Coastal dunes, coastal scrub, chaparral (maritime), cismontane woodland. Coastal sand dunes. Sandy openings in bare, wind-sheltered areas. Often near dune summit or in the hind dunes; two records from Pleistocene inland dunes. 16–804 feet in elevation. Blooms April–June. Annual.	*Not expected to occur*. Project area is not within the range of this species and does not contain coastal dune habitat potentially suitable for this species. *Gilia tenuiflora* ssp. *arenaria* is endemic to Santa Cruz and Monterey Counties. No impact is anticipated.
Toren's grimmia *Grimmia torenii*	-	-	1B.3	Cismontane woodland, lower montane coniferous forest, chaparral. Carbonate, openings, rocky, volcanic. 1066–3806 feet in elevation. Blooms Perennial.	*Not expected to occur*. Project does not contain carbonate volcanic rock habitat potentially suitable for this species. No impact is anticipated.
Vaginulate grimmia *Grimmia vaginulata*	-	-	1B.1	Chaparral. Openings; rocky, boulder and rock walls, carbonate. 2247–3724 feet in elevation. Blooms Perennial.	*Could occur*. Chaparral with rocky carbonate (limestone) habitat potentially suitable for this is present in the project area. Treatments could result in direct or indirect adverse effects on *Grimmia vaginulata*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Short-leaved evax *Hesperevax sparsiflora* var. *brevifolia*	-	-	1B.2	Coastal bluff scrub, coastal dunes, coastal prairie. Sandy bluffs and flats. 0–705 feet in elevation. Blooms March–June. Annual.	*Not expected to occur*. Project area does not contain coastal bluff scrub, coastal dune, or coastal prairie habitat. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Santa Cruz cypress *Hesperocyparis abramsiana* var. *Abramsiana*	FT	SE	1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest. Restricted to the Santa Cruz Mountains, on sandstone and granitic-derived soils; often w/Pinus attenuata, redwoods. 984–3560 feet in elevation. Blooms Perennial.	*Not expected to occur*. Project area is not within the range of this species. No impact is anticipated.
Butano Ridge cypress *Hesperocyparis abramsiana* var. *butanoensis*	FT	SE	1B.2	Closed-cone coniferous forest, lower montane coniferous forest, chaparral. Sandstone. 1312–1608 feet in elevation. Blooms October. Perennial.	*Not expected to occur*. Project area is not within the range of this species. *Hesperocyparis abramsiana* var. *butanoensis* is endemic to the Santa Cruz Mountains in San Mateo County. No impact is anticipated.
Loma Prieta hoita *Hoita strobilina*			1B.1	Chaparral, cismontane woodland, riparian woodland. Serpentine; mesic sites. 197–3199 feet in elevation. Blooms May–July (August), (October). Perennial.	*Could occur*. Riparian woodland with serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Hoita strobilina*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Santa Cruz tarplant *Holocarpha macradenia*	FT	SE	1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with nonnatives. 33–722 feet in elevation. Blooms June–October. Annual.	*Not expected to occur*. Project area is not within the range of this species. *Holocarpha macradenia* is extirpated at all locations except for north and central Monterey Bay (Jepson Flora Project 2022). No impact is anticipated.
Kellogg's horkelia *Horkelia cuneata* var. *sericea*	-		1B.1	Old dunes, coastal sandhills; openings. 16–705 feet in elevation. Blooms April–September. Perennial.	*Not expected to occur*. Project area does not contain old dunes or coastal sandhill habitat potentially suitable for this species. No impact is anticipated.
Point Reyes horkelia Horkelia marinensis	-	-	1B.2	Sandy coastal flats. 7–2543 feet in elevation. Blooms May–September. Perennial.	*Not expected to occur*. Project area does not contain sandy coastal flats habitat potentially suitable for this species. No impact is anticipated.
Perennial goldfields *Lasthenia californica* ssp. *macrantha*	-	-	1B.2	Grassland, dunes along immediate coast. 16–607 feet in elevation. Blooms January–November. Perennial.	*Not expected to occur*. Project area does not contain grasslands or dunes along immediate coast habitat potentially suitable for this species. No impact is anticipated.
Contra Costa goldfields *Lasthenia conjugens*	FE		1B.1	Vernal pools, wet meadows. 3–1476 feet in elevation. Blooms March–June. Annual.	*Not expected to occur*. Project area does not contain vernal pool or wet meadow habitat potentially suitable for this species. No impact is anticipated.
Legenere *Legenere limosa*	-	-	1B.1	In beds of vernal pools. 3–2887 feet in elevation. Blooms April–June. Annual.	*Not expected to occur*. Project area does not contain vernal pool habitat. No impact is anticipated.
Mt. Hamilton coreopsis *Leptosyne hamiltonii*	-	-	1B.2	Cismontane woodland. On steep shale talus with open southwestern exposure. 1739–4265 feet in elevation. Blooms March–May. Annual.	*Not expected to occur*. Project area is not within the range of this species. *Leptosyne hamiltonii* is endemic to the Mt. Hamilton Range, east of the project area. No impact is anticipated.

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Smooth lessingia *Lessingia micradenia* var. *glabrata*	-	-	1B.2	Chaparral, cismontane woodland. Serpentine; often on roadsides. 394–1378 feet in elevation. Blooms (May), (June), July–November. Annual.	*Could occur*. Chaparral and woodland with serpentine and roadside habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Lessingia micradenia* var. *glabrata*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Mt. Hamilton lomatium *Lomatium observatorium*	-	-	1B.2	Cismontane woodland. Open to partially shaded openings in Pinus coulteri-oak woodland. Sedimentary Franciscan rocks and volcanics. 1788–4003 feet in elevation. Blooms March–May. Perennial.	*Not expected to occur*. Project area is not within the range of this species. *Lomatium observatorium* is endemic to the Mt. Hamilton Range, east of the project area. No impact is anticipated.
Arcuate bush-mallow *Malacothamnus arcuatus* (Synonym: *Malacothamnus fasciculatus*)	-	-	1B.2	Chaparral, cismontane woodland. Gravelly alluvium. 3–2411 feet in elevation. Blooms April–September. Perennial.	*Could occur*. Chaparral and woodland with gravelly alluvium habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Malacothamnus arcuatus*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Hall's bush-mallow *Malacothamnus hallii*	-	-	1B.2	Chaparral, coastal scrub. Some populations on serpentine. 33–2395 feet in elevation. Blooms May–September (October). Perennial.	*Could occur*. Chaparral with and without serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Malacothamnus hallii*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Marsh microseris *Microseris paludosa*	-	-	1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 16–984 feet in elevation. Blooms April–June (July). Perennial.	*Not expected to occur*. Project area is not within the range of this species. This species has not been reported east of the Santa Cruz Mountain crest. No impact is anticipated.
Northern curly-leaved monardella *Monardella sinuata* ssp. *nigrescens*	-	-	1B.2	Dunes, openings in coastal scrub. 0–984 feet in elevation. Blooms (April), May–July (August), (September). Annual.	*Not expected to occur*. Project area is not within the range of this species This species relies on coastal influence and has not been reported east of the Santa Cruz Mountain crest. No impact is anticipated.

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Woodland woollythreads *Monolopia gracilens*	-	-	1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broadleafed upland forest, north coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. 328–3937 feet in elevation. Blooms (February), March–July. Annual.	*Known to occur*. Coniferous forest, woodland, chaparral, and grassland habitat potentially suitable for this species is present in the project area. This species was documented during protocol level surveys Spring 2022 in polygon 76 (access road treatment area), which is located in the middle of the project area near Los Gatos Creek (Bartosh, pers. comm., 2022). Treatments could result in direct or indirect adverse effects on *Monolopia gracilens*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Kellman's bristle moss *Orthotrichum kellmanii*	-	-	1B.2	Chaparral, cismontane woodland. Carbonate, sandstone. Blooms January–February. Perennial.	*Could occur*. Coniferous forest and woodland with limestone habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Orthotrichum kellmanii*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Dudley's lousewort *Pedicularis dudleyi*	-	SR	1B.2	Coastal chaparral and forest. 197–2953 feet in elevation. Blooms April–June. Perennial.	*Not expected to occur*. Project area does not contain coastal chaparral or forest. No impact is anticipated.
Santa Cruz Mountains beardtongue *Penstemon rattanii* var. *kleei*	-	-	1B.2	Chaparral, redwood, and hardwood forests. Sandy shale slopes; sometimes in the transition between forest and chaparral. 1312–3609 feet in elevation. Blooms May–June. Perennial.	*Could occur*. Chaparral, redwood, and hardwood habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Penstemon rattanii* var. *kleei*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
White-rayed pentachaeta *Pentachaeta bellidiflora*	FE	SE	1B.1	Valley and foothill grassland, cismontane woodland. Open dry rocky slopes and grassy areas, often on soils derived from serpentine bedrock. 115–2001 feet in elevation. Blooms March–May. Annual.	*Could occur*. Grassland and woodland with serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Pentachaeta bellidiflora*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.

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Mt. Diablo phacelia *Phacelia phacelioides*	-	-	1B.2	Chaparral, cismontane woodland. Adjacent to trails, on rock outcrops and talus slopes; sometimes on serpentine. 1985–4413 feet in elevation. Blooms April–May. Annual.	*Not expected to occur*. Project area is out of range of this species. No impact is anticipated.
Monterey pine *Pinus radiata*	-	-	1B.1	Closed-cone coniferous forest, cismontane woodland. Three primary stands are native to California. Dry bluffs and slopes. 197–410 feet in elevation. Blooms Perennial.	*Not expected to occur*. Project area is out of range of this species. No impact is anticipated.
White-flowered rein orchid *Piperia candida*	-	-	1B.2	Open to shady sites, conifer and mixed-evergreen forest. 148–5299 feet in elevation. Blooms (March), May–September. Perennial.	*Could occur*. Conifer and mixed evergreen forest habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Piperia candida*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Choris' popcornflower *Plagiobothrys chorisianus* var. *chorisianus*	-	-	1B.2	Chaparral, coastal scrub, coastal prairie. Mesic sites. 49–525 feet in elevation. Blooms March–June. Annual.	*Not expected to occur*. Project area does not contain mesic chaparral or coastal scrub habitat. No impact is anticipated.
San Francisco popcornflower *Plagiobothrys diffusus*	-	SE	1B.1	Valley and foothill grassland, coastal prairie. Historically from grassy slopes with marine influence. 148–1181 feet in elevation. Blooms March–June. Annual.	*Not expected to occur*. Project area does not contain grassy slopes with marine influence. No impact is anticipated.
Hairless popcornflower *Plagiobothrys glaber*	-	-	1A	Coastal salt marshes and alkaline meadows. 15–600 feet in elevation. Blooms March–May. Annual.	*Not expected to occur*. Project area does not contain coastal salt marsh and alkaline meadow habitat. No impact is anticipated.
Scotts Valley polygonum *Polygonum hickmanii*	FE	SE	1B.1	Valley and foothill grassland. Purisima sandstone or mudstone with a thin soil layer; vernally moist due to runoff. 689–755 feet in elevation. Blooms May–August. Annual.	*Not expected to occur*. Project area is not within the range of this species. *Polygonum hickmanii* is endemic to the Scotts Valley in Santa Cruz County. No impact is anticipated.
Sanford's arrowhead *Sagittaria sanfordii*	-	-	1B.2	In standing or slow-moving freshwater ponds, marshes, and ditches. 0–2140 feet in elevation. Blooms May–October (November). Geophyte.	*Not expected to occur*. Project area is not within the range of this species. *This species has never been reported from the Santa Cruz mountains and observations outside of the Central Valley are questionable*. No impact is anticipated.

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Rock sanicle *Sanicula saxatilis*	-	SR	1B.2	Bedrock outcrops and talus slopes in chaparral or oak woodland habitat. 2198–4101 feet in elevation. Blooms April–May. Perennial.	*Could occur*. Chaparral and woodland with outcrop habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Sanicula saxatilis*. Pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Chaparral ragwort *Senecio aphanactis*	-	-	2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 66–2805 feet in elevation. Blooms January–April (May). Annual.	*Not expected to occur*. Project area does not contain grassland with alkaline soil habitat potentially suitable for this species. No impact is anticipated.
Santa Cruz microseris *Stebbinsoseris decipiens*	-	-	1B.2	Broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, valley and foothill grassland. Openings. Sometimes on serpentine. 33–1640 feet in elevation. Blooms April–May. Annual.	*Could occur*. Broadleafed upland forest, chaparral, coastal scrub, and grassland habitat with openings in and out of serpentine soil potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Stebbinsoseris decipiens*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found
Metcalf Canyon jewelflower *Streptanthus albidus* ssp. *albidus*	FE	-	1B.1	Valley and foothill grassland. Relatively open areas in dry grassy meadows on serpentine soils; also on serpentine balds. 148–2625 feet in elevation. Blooms April–July. Annual.	*Not expected to occur*. Project area is out of range of this species. This species does not typically occur west of the San Andreas fault zone. No impact is anticipated.
Most beautiful jewelflower *Streptanthus albidus* ssp. *peramoenus*	-	-	1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Serpentine outcrops, on ridges and slopes. 312–3281 feet in elevation. Blooms (March), April–September (October). Annual.	*Could occur*. Chaparral and grassland with serpentine habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Streptanthus albidus* ssp. *peramoenus*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Santa Cruz clover *Trifolium buckwestiorum*	-	-	1B.1	Coastal prairie, broadleafed upland forest, cismontane woodland. Grassy or disturbed areas. 344–2001 feet in elevation. Blooms April–October. Annual.	*Could occur*. Grassland and disturbed habitat potentially suitable for this species is present in the project area. Treatments could result in direct or indirect adverse effects on *Trifolium buckwestiorum*. However, this species is an annual herb. Impacts on this species would be avoided by implementing treatment activities during the dormant season, after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If treatment activities cannot be completed in the dormant season and would be implemented during the growing season, pre-treatment surveys will be conducted per SPR BIO-7. This species will be flagged and avoided by treatment activities if found.
Saline clover *Trifolium hydrophilum*	-	-	1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0–984 feet in elevation. Blooms April–June. Annual.	*Not expected to occur*. Project area does not contain alkaline habitat potentially suitable for this species. No impact is anticipated.
Pacific Grove clover *Trifolium polyodon*	-	SR	1B.1	Wetland. Closed-cone coniferous forest, meadows and seeps, coastal prairie, valley and foothill grassland. Along small springs and seeps in grassy openings. 16–394 feet in elevation. Blooms April–June (July). Annual.	*Not expected to occur*. Project area is not within the range of this species. This species has not been reported east of the Santa Cruz Mountains crest. No impact is anticipated.
Invertebrates					
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT			Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant; *Orthocarpus densiflorus* and *O. purpurscens* are the secondary host plants.	*Not expected to occur*. The project area includes small (total of < 9.01 acres) grassland patches on serpentine soils. However, e the project area is outside of the currently known range of the species. While the project area is less than 10 miles from the nearest documented occurrence (CNDDB 2022a), given the limited dispersal range of the species and lack of habitat connectivity between the current range and the project area, the species is not likely to be present within these small isolated grassland patches. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Crotch bumble bee *Bombus crotchii*		CE		Found primarily in California: Mediterranean climates along the Pacific coast, western desert, Great Valley, and adjacent foothills through most of southwestern California. Habitat includes open grassland and scrub. Nests underground.	*Could occur.* Crotch bumble bees have been recently recorded in the project region (CNDDB 2022a) and potentially suitable habitat occurs within the project area. Treatment activities within suitable habitat for Crotch bumble bee may result in the removal of floral resources; however, habitat function of chaparral suitable for Crotch bumble bee would be maintained. If Crotch bumble bees are detected during pre-treatment surveys, or if presence of the species in suitable habitat is assumed, treatment of suitable habitat will be designed to maintain floral resources during any year of treatment, and limitations on use of herbicides during the flight season would be implemented to minimize injury or mortality. Information on bumble bees in general, and Crotch bumble bee specifically, is gradually becoming more available. However, there is limited information on the abundance of Crotch bumble bee in California or colony size (CDFW 2019), and a current lack of published information on the potential magnitude of effects from the loss of individual Crotch bumble bee overwintering queens or nests on populations of the species. Therefore, assessing the significance of impacts on the species due to the potential loss of overwintering queens or nests from this project would be speculative. CEQA Guidelines indicate that after thorough investigation, if an impact is too speculative for meaningful evaluation, this finding should be noted, and further discussion can be concluded (State CEQA Guidelines Section 15145). Coordination with CDFW on the species concluded that for CESA compliance purposes the mitigation actions for the species are appropriate measures to maintain suitable refuge and habitat functions of floral resources for Crotch bumble bee and no additional recommendations to avoid impacts to the species were provided (Swan, pers. comm., 2022). For these reasons, it is unlikely that populations of these species would be reduced below self-sustaining levels as a result of implementation of the proposed project or that treatment activities would substantially reduce the number or restrict the range of this species.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Monarch butterfly *Danaus plexippus*	FC			Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Along migration routes and within summer ranges, monarch butterflies require two suites of plants: (1) host plants for monarch caterpillars, which are primarily milkweeds (*Asclepias* spp.) within the family *Apocynaceae* upon which adult monarchs lay eggs; and (2) nectar-producing flowering plants of many other species that provide food for adult butterflies. Having both host and nectar plants available from early spring to late fall and along migration corridors is critical to the survival of migrating pollinators.	*Could occur*. The eucalyptus stands and other potentially suitable forest stands within the project area are more than 10 miles from the coast or bay and at elevations over 1,400 feet and therefore are not likely to provide overwintering habitat for monarch butterflies (CBD et al. 2014), While there are limited known occurrences of milkweed host plants in the project area and monarch breeding is not known to occur (Western Milkweed Mapper 2022), monarch host plants and breeding may occur within the project area. Treatments within oak woodlands and grasslands may result in the loss of host plants if present. If monarch butterflies or host plants are detected or assumed to occur in suitable habitat, treatment of suitable habitat will be designed to avoid milkweed when feasible and to maintain habitat function for the species. The species is currently a candidate for federal listed under ESA. Should the species be listed, further consultation with the USFWS may be required.
Mount Hermon (=barbate) June beetle *Polyphylla barbata*	FE			Interior dunes. Known only from sand hills in vicinity of Mt. Hermon, Santa Cruz County.	*Not expected to occur*. The project area is located outside the range of the species, which is of limited distribution within Santa Cruz County, and therefore outside of the range of this species. No impact is anticipated.
Ohlone tiger beetle *Cicindela ohlone*	FE			Coastal prairie. Remnant native grasslands with California oatgrass and purple needlegrass in Santa Cruz County. Substrate is poorly-drained clay or sandy clay soil over bedrock of Santa Cruz mudstone.	*Not expected to occur*. The project area is located outside the range of the species, which is of limited distribution within Santa Cruz County, and therefore outside of the range of this species. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Western bumble bee *Bombus occidentalis*		CE		Once common throughout much of its range, in California, this species is currently largely restricted to high elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	*Could occur*. The species has been documented in the Santa Cruz area as recently as 1998 (CNDDB 2022a), and potentially suitable habitat occurs within the project area. Treatment activities within suitable habitat for western bumble bee may result in the removal of floral resources required for the species; however, habitat function of chaparral suitable for western bumble bee would be maintained. If western bumble bees are detected during pre-treatment surveys, or if presence of the species in suitable habitat is assumed, treatment of suitable habitat will be designed to maintain patches of floral resources during treatment, and limitations on use of herbicides during the flight season would be implemented to minimize injury or mortality. Information on bumble bees in general, and western bumble bee specifically, is gradually becoming more available. However, there is limited information on the abundance of western bumble bee in California or colony size (CDFW 2019), and a current lack of published information on the potential magnitude of effects from the loss of individual western bumble bee overwintering queens or nests on populations of the species. Therefore, assessing the significance of impacts on the species due to the potential loss of overwintering queens or nests from this project would be speculative. CEQA Guidelines indicate that after thorough investigation, if an impact is too speculative for meaningful evaluation, this finding should be noted, and further discussion can be concluded (State CEQA Guidelines Section 15145). Coordination with CDFW on the species concluded that for CESA compliance purposes the mitigation actions for the species are appropriate measures to maintain suitable refuge and habitat functions of floral resources for western bumble bee and no additional recommendations to avoid impacts to the species were provided (Swan, pers. comm., 2022). For these reasons, it is unlikely that populations of these species would be reduced below self-sustaining levels as a result of implementation of the proposed project or that treatment activities would substantially reduce the number or restrict the range of this species.
Zayante band-winged grasshopper *Trimerotropis infantilis*	FE			Chaparral, interior dunes. Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem) Mostly on sand parkland habitat but also in areas with well-developed ground cover and in sparse chaparral with grass.	*Not expected to occur*. The project area is located outside of the Zayante Sand Hills Ecosystem, which is of limited distribution within Santa Cruz County (Santa Cruz County 2011), and therefore outside the range of this species. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Fishes					
Coho salmon - central California coast ESU *Oncorhynchus kisutch*	FE	SE		Require beds of loose, silt-free, coarse gravel for spawning. Also need cover, cool water and sufficient dissolved oxygen.	*Not expected to occur*. The portions of the project area that are directly adjacent to fish bearing streams are upstream of total fish passage barriers and are inaccessible to this species (CNDDB 2022b). No impact is anticipated.
Eulachon *Thaleichthys pacificus*	FT			Aquatic, Klamath/North coast flowing waters. Found in Klamath River, Mad River, Redwood Creek and in small numbers in Smith River and Humboldt Bay tributaries. Spawn in lower reaches of coastal rivers with moderate water velocities and bottom of pea-sized gravel, sand and woody debris.	*Not expected to occur*. The portions of the project area that are directly adjacent to fish bearing streams are upstream of total fish passage barriers and are inaccessible to this species. No impact is anticipated.
Southern coastal roach *Hesperoleucus venustus subditus*		SSC		Found in the drainages of Tomales Bay and northern San Francisco Bay in the north, and drainages of Monterey Bay in the south.	*Not expected to occur*. The only documented location of the species in the project region is along Llagas creek in the Pajaro River drainage above Chesbro Reservoir (CNDDB 2022a), which is not hydrologically connected to streams in the project area. The project is outside of the current range of the species described in Baumstieger and Moyle (2019). While, California roach has been documented with Los Gatos Creek and Saratoga Creek (Smith 2013), there are no records of southern coastal roach in these waters. No impact is anticipated.
Steelhead – central California coast DPS *Oncorhynchus mykiss irideus*	FT			Aquatic. Sacramento/San Joaquin flowing waters. From Russian River, south to Soquel Creek and to, but not including, Pajaro River. Also San Francisco and San Pablo Bay basins.	*Not expected to occur*. The portions of the project area that are directly adjacent to fish bearing streams are upstream of total fish passage barriers and are inaccessible to this species (CNDDB 2022b). No impact is anticipated.
Steelhead - south-central California coast DPS *Oncorhynchus mykiss irideus*	FT			Sacramento/San Joaquin flowing waters. South coast flowing waters. Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including the Santa Maria River.	*Not expected to occur*. The portions of the project area that are directly adjacent to fish bearing streams are upstream of total fish passage barriers, and are inaccessible to this species (CNDDB 2022b). No impact is anticipated.
Tidewater goby *Eucyclogobius newberryi*	FE	SSC		Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	*Not expected to occur*. The project area is not directly adjacent to, and does not contain, any brackish water lagoon habitat that would support this species. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Reptiles and Amphibians					
California giant salamander *Dicamptodon ensatus*		SSC		Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	*Could occur.* Suitable habitat for California giant salamander is present within the project area, and the project area is within the range of the species (Cal Herps 2022a). Treatment activities within suitable habitat for California giant salamander may result in the injury or death of individuals if present. If California giant salamanders are detected during pre-treatment surveys, biological monitoring, and work stoppages would be implemented to avoid or minimize injury or mortality.
California red-legged frog *Rana draytonii*	FT	SSC		Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat in adjacent natural upland vegetation.	***Known to occur.*** California red-legged frogs have been documented along Los Gatos Creek and Saratoga Creek as well as in the more eastern portions of the project area and vicinity (CNDDB 2022a). Suitable aquatic habitat is present within and adjacent to treatment areas, and upland habitat for California red-legged frog is present within treatment areas. Treatment activities within suitable habitat for California red-legged frog may result in the injury or death of individuals if present during these activities. If California red-legged frogs are detected during pre-treatment surveys or assumed to occur within treatment areas, biological monitoring, and work stoppages, along with implementation of WLPZs would be implemented to avoid injury or mortality.
California tiger salamander - central California DPS *Ambystoma californiense*	FT	ST		Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	*Could occur.* The project is within the range of California tiger salamander (CNDDB 2022c) and the eastern-most treatment areas occur within a mile of a presumed extant occurrence (CNDDB 2022a). In addition, potentially suitable aquatic habitat is located within a mile of these treatment locations, and therefore these locations may be suitable as upland habitat. The remainder of the treatment areas, while within the range of the species, are far enough from these documented occurrences and suitable aquatic habitat (seasonal water sources) that the species is not anticipated to occur. Treatment activities within suitable habitat for California tiger salamander may result in the injury or death of individuals if present in the treatment area. If California tiger salamanders are detected during surveys, or presence is assumed, seasonal restrictions on treatment activities and the methods used would be implemented to avoid injury or mortality.
Coast horned lizard *Phrynosoma blainvillii*		SSC		Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	*Could occur.* The chaparral, oak woodland, and grassland habitat within the project area provides suitable habitat, and the project area is within the range of this widely distributed species. Treatment activities within suitable habitat for coast horned lizard may result in the injury or death of individuals if present. If coast horned lizards are detected during surveys, biological monitoring, and relocation of individual animals by a qualified biologist, would be implemented to reduce injury or mortality.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Foothill yellow-legged frog *Rana boylii*		SE SSC		Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	*Could occur.* The species occurred historically in the vicinity of the project along Hendry's Creek and Saratoga Creek; however, these populations have been extirpated (CNDDB 2022a). Suitable habitat for the species is very limited along upper Los Gatos Creek (Dudek 2020). However, the species may occur within perennial creeks in the project area without dense riparian canopies. Treatment activities within suitable habitat for foothill yellow-legged frog may result in the injury or death of individuals if present. If foothill yellow-legged frogs are detected during surveys, or presence is assumed within treatment areas, biological monitoring, and relocation of individual animals by a qualified biologist, and WLPZs would be implemented to reduce injury to or mortality.
Northern California legless lizard *Anniella pulchra*		SSC		Sandy or loose loamy soils under sparse vegetation in chaparral and coastal scrub. Soil moisture is essential. They prefer soils with a high moisture content.	*Could occur:* The project area is within the range of this species (Cal Herps 2022c). Project treatments within suitable chaparral and scrub habitat for Northern California legless lizard may result in the injury or death of individuals if present. If northern California legless lizards are detected during surveys, biological monitoring, and relocation of individual animals by a qualified biologist, would be implemented to reduce injury or mortality.
Red-bellied newt *Taricha rivularis*		SSC		Isolated population of uncertain origin in Santa Clara County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 km to breed, typically in streams with moderate flow and clean, rocky substrate.	*Not expected to occur*. Species is unlikely to be present in the project area because the only known occurrence within the region is isolated to Upper Steven's Creek County Park, which is outside of the project area. No impact is anticipated.
San Francisco gartersnake *Thamnophis sirtalis tetrataenia*	FE	SE FP		Vicinity of freshwater marshes, ponds and slow-moving streams in San Mateo County and extreme northern Santa Cruz County. Prefers dense cover and water depths of at least one foot. Upland areas near water are also very important.	*Not expected to occur*. While the species is known to occur as far south as southern San Mateo County (Kim et al. 2018) and extreme northern Santa Cruz County, it is not known to occur in Santa Clara County (USFWS 2007); therefore, the project is outside of the range of the species. No impact is anticipated.
Santa Cruz black salamander *Aneides niger*		SSC		Mixed deciduous and coniferous woodlands and coastal grasslands in San Mateo, Santa Cruz, and Santa Clara counties. Adults found under rocks, talus, and damp woody debris.	***Known to occur.*** Santa Cruz black salamander is known to occur along Saratoga Creek within the proposed treatment area and in multiple locations within the Los Gatos Creek drainage (CNDDB 2022a). The forested and woodland portions of the project area provide suitable habitat for the species. Project treatments within suitable habitat for Santa Cruz black salamander may result in the injury or death of individuals if present. If Santa Cruz black salamander are detected during surveys, biological monitoring, and relocation of individual animals by a qualified biologist, would be implemented to reduce injury to or mortality.

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Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	FE	SE FP		Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties. Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover. Adults use mammal burrows.	*Not expected to occur*. While the species is known to occur in in the project region its distribution is restricted to locations in wet meadows in Santa Cruz County; therefore, the project is outside of the range of the species. No impact is anticipated.
Western pond turtle *Emys marmorata*		SSC		A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.3 mile from water for egg-laying.	*Could occur*. Western pond turtle is known to occur in the vicinity of the project in Lexington Reservoir and Aldercroft Creek (CNDDB 2022a). Streams and potential upland habitat may occur in open areas of the project area (within 0.3 mile from streams, ponds, and reservoirs). Project treatments within suitable habitat for western pond turtle may result in the injury or death of individuals if present. If western pond turtles are detected during surveys, or presence is assumed within suitable habitat, biological monitoring, avoidance of nests, along with implementation of WLPZs would be implemented to reduce injury or mortality.
Birds					
American peregrine falcon *Falco peregrinus anatum*	FD	SD FP		Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	*Could occur*. The species is known to occur in the general location of the project area (CNDDB 2022a) and the project area contains suitable foraging habitat for the species. However, American peregrine falcons are not likely to nest in treatment areas due to lack of potential nest substrates. Treatment activities would not likely result in impacts to foraging habitat, or affect nesting sites; therefore, no impact is anticipated.
Bank swallow *Riparia riparia*		ST		Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	*Not expected to occur*. The species was documented to occur historically in the project region. However, the distribution of these historical occurrences is on the coast of Santa Cruz County and along the Pajaro River (CNDDB 2022a). Los Gatos and Saratoga Creeks within the project area do not contain the vertical banks with fine sandy soils required for nesting. No impact is anticipated.
Black swift *Cypseloides niger*		SSC		Coastal belt of Santa Cruz and Monterey Co; central and southern Sierra Nevada; San Bernardino and San Jacinto Mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	*Could occur*. The species was documented to occur historically in the project region. The distribution of these historical occurrences is primarily on the coast of Santa Cruz County; however, one historical occurrence was documented to the southeast of the project area along Alamitos Creek (CNDDB 2022a). Upper Los Gatos Creek within the project area may provide suitable nesting habitat for this species. Treatment activities that occur along upper Los Gatos Creek could result in disturbance of black swift nests and loss of eggs and young. If active black swift nests are observed during focused surveys, a non-disturbance buffer would be established around the nest to avoid mortality or disturbance.

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Burrowing owl *Athene cunicularia*		SSC		Coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrows of mammals, most notably, the California ground squirrel, and similar structures.	*Could occur*. Burrowing owl has been documented to occur historically within 3 miles of the eastern portion of the project area (CNDDB 2022a). While, larger open grassland habitats are absent within the project area, and only smaller (approximately 1 to 4 acre) isolated grassland patches are present in the eastern part of the project area, the use of the project area by burrowing owl cannot be ruled out. Treatment activities that occur within suitable grassland habitat, during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young, if present in treatment areas. If active burrowing owl nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest to avoid disturbance.
California black rail *Laterallus jamaicensis coturniculus*		ST FP		Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	*Not expected to occur*. The project area does not contain marsh or wet meadow habitat suitable for this species. No impact is anticipated.
Golden eagle *Aquila chrysaetos*		FP		Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	*Could occur*. Golden eagles are known to occur within the project region (CNDDB 2022a). Large trees potentially suitable for nesting occur within open areas within the project area. Treatments would not remove nesting trees, but may result in disturbance of golden eagle nests and loss of eggs and young, if present. If active golden eagle nests are detected during focused surveys, then a non-disturbance buffer would be established around the nest to avoid mortality or disturbance.
Grasshopper sparrow *Ammodramus savannarum*		SSC		Valley and foothill grassland. Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	*Could occur.* The species is documented to occur within the project region; however, the single documented occurrence is located on Coyote Ridge in eastern Santa Clara County over 9 miles from the nearest treatment area (CNDDB 2022a). While most grassland habitats within the project area are small and isolated and not likely to be suitable for this species, grassland habitat near the peak of Mt. Umunhum may be suitable. Treatments conducted within habitat suitable for grasshopper sparrow during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young, if present in treatment areas. If active grasshopper sparrow nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest to avoid disturbance.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Loggerhead shrike *Lanius ludovicianus*		SSC		Broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodlands, Sonoran desert scrub. Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open areas for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Could occur. The species is documented within the project region (CNDDB 2022a). Suitable habitat is present in the more open portions of the project area within oak woodlands, grasslands, and chaparral. Treatments conducted within habitat suitable for loggerhead shrike during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young, if present in treatment areas. If active loggerhead shrike nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest to avoid disturbance.
Long-eared owl *Asio otus*		SSC		Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	*Could occur*. The species is known to occur within the project region; however, the only documented occurrence was a detection in 1987 (CNDDB 2022a). Riparian habitat and live oak along streams suitable for nesting is present within treatment areas, and foraging habitat is present. Treatments conducted within habitat suitable for log-eared owl nesting during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young, if present in treatment areas. If active long-eared owl nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest to avoid disturbance.
Marbled murrelet *Brachyramphus marmoratus*	FT	SE		Lower montane coniferous forest, old growth, redwood. Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, inland, often in Douglas-fir.	*Not expected to occur*. The species is documented to occur within the project region and the project is within Zone 6 of the species recovery plan, although documented occurrences are limited to San Mateo and northwestern Santa Cruz County (CNDDB 2022a) outside of the project area on the west side of the crest of the Santa Cruz Mountains. While individual redwood and Douglas fir trees in the project area may be large enough to be suitable for nesting, the project is outside of the known nesting range within the Santa Cruz Mountains as defined in (Halbert and Singer 2017). Therefore, the project area is not likely to be used by marbled murrelet for nesting. No impact is anticipated.
Purple martin *Progne subis*		SSC		Broadleaved upland forest, lower montane coniferous forest. Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree/snag.	***Known to occur.*** The species is documented to occur within the project area in the vicinity of Mount Umunhum (CNDDB 2022a). Large trees and snags within the project area provide suitable nesting habitat for this species. Treatments conducted within habitat suitable for purple martin during the nesting bird season could destroy or disturb active nests, potentially resulting in abandonment of the nest and loss of young. If active purple martin nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*		SSC		Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	*Not expected to occur*. The project area does not contain marsh habitat suitable for this species. No impact is anticipated.
Swainson's hawk *Buteo swainsoni*		ST		Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	*Not expected to occur*. The species is documented to occur within the project region; however, the nearest recent documented occurrences are located along Coyote Creek in eastern Santa Clara County over 9 miles to the east of the nearest treatment area (CNDDB 2022a), and the project area is at the western most portion of the species range (CWHR 2011) In addition, while suitable nesting trees may occur, and grassland habitats are present within the project area these grassland habitats are small and isolated and not likely to be suitable foraging habitat for this species. No impact is anticipated.
Tricolored blackbird *Agelaius tricolor*		ST SSC		Freshwater marsh, marsh and swamp, swamp, wetland. Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey in proximity of the colony in the form of large grassland habitats or agricultural areas.	*Not expected to occur*. The species is known to occur within the project region, both from Coastal Santa Cruz County and interior Santa Clara County. The nearest documented occurrence is on Caldero Reservoir approximately 11 miles and on the other side of Mt. Umunhum from riparian habitat along Los Gatos Creek, and approximately 15 miles from riparian habitat along Saratoga Creek (CNDDB 2022a). While treatments would occur within riparian habitats, these riparian habitats are not surrounded by suitable foraging habitat for the species. No impact is anticipated.
Western snowy plover *Charadrius nivosus nivosus*	FT	SSC		Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	*Not expected to occur*. The documented occurrences of this species within the project region is limited to coastal beaches and salt ponds of the San Francisco Bay (CNDDB 2022a). The project area does not contain beach or sandy, gravelly or friable soils suitable for nesting. No impact is anticipated.
White-tailed kite *Elanus leucurus*		FP		Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	*Could occur*. Trees and snags within the oak woodland portions of the project area may provide suitable nesting habitat for this species. Treatments conducted within habitat suitable for white-tailed kite during the nesting bird season could destroy or disturb active nests if present, potentially resulting in abandonment of the nest and loss of young. If active white-tailed kite nests are observed during focused surveys, then a non-disturbance buffer would be established around the nest to avoid injury, mortality, or disturbance.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Yellow rail *Coturnicops noveboracensis*		SSC		Freshwater marsh, meadow and seep. Summer resident in eastern Sierra Nevada in Mono County. Fresh-water marshlands.	*Not expected to occur*. The project area does not contain marsh habitat suitable for this species. No impact is anticipated.
Yellow-breasted chat *Icteria virens*		SSC		Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	*Not expected to occur*. The species is documented to occur within the project region (CNDDB 2022a); although there is only a single documented occurrence located on Coyote Creek, over 13 miles from the portions of the project area containing riparian habitat. The project area is outside of the documented current range of the species (CNDDB 2022d). No impact is anticipated.
Mammals					
American badger *Taxidea taxus*		SSC		Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog a fen, brackish marsh, broadleaved upland forest, chaparral, chenopod scrub, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	*Could occur*. The species is documented to occur in the project region (CNDDB 2022a). Oak woodland and more open chaparral habitats within the project area provide suitable denning and foraging habitat for this burrowing and denning species. Treatments conducted within habitat suitable for American badger during the pupping season could result in disturbance of maternity dens if present. Pre-treatment surveys in suitable denning habitat and no-disturbance buffers of 100 feet around active maternity dens would be implemented to avoid and minimize disturbance.
Mountain lion-Southern California/Central Coast evolutionary significant unit *Puma concolor*		CT		Found in most habitats within Central California. Uses caves, other natural cavities, and brush thickets for cover and denning often within riparian habitats.	***Known to occur***. Foraging habitat is present within the project area, and more remote areas within the project area away from human disturbance provide denning habitat (Yovovich et al. 2020). Treatments conducted within suitable denning/nursery habitat could disturb active dens/nurseries, potentially resulting in abandonment of the den/nursery. However, due to the large areas of potential denning/nursery habitat adjacent to treatment areas when compared to the acreage that would be treated in any given year, disturbance of denning lions would likely result in the mother moving her cubs to another nearby suitable nursery location. The movement of cubs could have adverse effects on the cubs if initiated by project activities rather than the mother on her own.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Pallid bat *Antrozous pallidus*		SSC		Most common in open, dry habitats. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating Ponderosa pine and valley oak bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings. Very sensitive to disturbance of roosting sites.	*Could occur.* The species is documented to occur in the project region (CNDDB 2022a). Cavities in large trees and snags within the project area may be suitable roosts for pallid bat. Treatments conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts, potentially resulting in abandonment of the roost and loss of young. If active roosts are found during pre-treatment surveys, a no-disturbance buffer of 250 feet would be established around the roost to avoid and minimize disturbance, injury, or mortality.
Ringtail *Bassariscus astutus*		FP		Riparian habitats, forest habitats, and shrub habitats used for denning and foraging in lower to middle elevations. Usually, but not always found within 0.6 mile of a permanent water source.	*Could Occur.* The project area contains suitable forested and riparian habitat for this species. There are no documented occurrences in the project region, although the species in not tracked in the CNDDB. Treatments conducted within habitat suitable for ringtail during the maternity season (April 15 – June 30) could result in disturbance of maternity dens and loss of kits and females. Pre-treatment surveys in suitable denning habitat, monitoring, and no-disturbance buffers of 0.25 mile around active maternity dens would be implemented to avoid and minimize disturbance, injury, or mortality.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*		SSC		Chaparral, redwood. Forest habitats of moderate canopy and moderate to dense understory. May prefer chaparral and redwood habitats. Constructs nests of shredded grass, leaves and other material. May be limited by availability of nest-building materials.	*Could occur.* The species is documented to occur in the project region (CNDDB 2022a). The chaparral, woodland, and forest habitats within the project area are suitable habitat for San Francisco dusky-footed woodrat. Treatments conducted in suitable habitat could result in the disturbance or destruction of woodrat nests and potential injury or mortality of individuals if present. If woodrat nests are found during pre-treatment surveys, a no-disturbance buffer around nests, monitoring, and if the nest cannot be avoided, relocation would be implemented to avoid and minimize disturbance, injury, or mortality.
San Joaquin kit fox *Vulpes macrotis mutica*	FE	ST		Chenopod scrub, valley and foothill grassland. Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	*Not expected to occur.* The species was known to occur historically in the project region from the eastern portion of Santa Clara County (CNDDB 2022a); however, the project area is outside of the current range of the species (CWHR 2008). Grassland habitat is present within the project area; however, this habitat type is fragmented and located within a matrix of habitats (e.g., chaparral, developed, forested) that are unsuitable for San Joaquin kit fox. The project area therefore does not contain suitable habitat for the species. No impact is anticipated.

Species	Status[1] Federal	Status[1] State	Status[1] CRPR/ Other	Habitat and Blooming Period	Potential for Occurrence[2]/Potential Impact
Townsend's big-eared bat *Corynorhinus townsendii*		SSC		Broadleaved upland forest, chaparral, chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, meadow and seep, Mojavean desert scrub, riparian forest, riparian woodland, Sonoran desert scrub. Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in caves, abandoned, buildings, rock crevices, and large cavities in trees (CDFW 2013). Roosting sites limiting. Extremely sensitive to human disturbance.	*Could occur.* Townsend's big eared bat has been documented to occur within the project region and to occur historically within the Los Gatos Creek drainage (CNDDB 2022a). Cavities in large redwood trees and crevices in rock outcrops within the project area may be suitable roosts for Townsend's big-eared bat. Treatments conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts, potentially resulting in abandonment of the roost and loss of young. If active roosts are found during pre-activity surveys, a no-disturbance buffer of 250 feet would be established around the roost.

Note: CNDDB = California Natural Diversity Database; DPS= Distinct Population Segment; CESA = California Endangered Species Act; CRPR = California Rare Plant Rank; ESA = Endangered Species Act

[1] Legal Status Definitions

Federal:

FE Endangered (legally protected)
FT Threatened (legally protected)
FC Candidate Endangered
FD Delisted

State:

CE Candidate threatened (legally protected)
CT Candidate threatened (legally protected)
SE Endangered (legally protected)
ST Threatened (legally protected)
FP Fully protected (legally protected)
SD Delisted
SR Rare (legally protected by NPPA)
SSC Species of special concern (no formal protection other than CEQA consideration)

California Rare Plant Ranks:

1A Plant species considered presumed extirpated in California and either rare or extinct elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
Threat Ranks
0.1-Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat)

[2] Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present on the project site due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.
Could occur: Suitable habitat is available at the project site; however, there are little to no other indicators that the species might be present.
Known to occur: The species, or evidence of its presence, was observed at the project site during reconnaissance surveys, or was reported by others.
Sources: CNPS 2022b, CNDDB 2022a; CNDDB 2022b; CNDDB 2022c; CNDDB 2022d; Cal Herps 2022a; Cal Herps 2022b; Cal Herps 2022c; CDFW 2013; CWHR 2008; MROSD 2021; Santa Cruz County 2011

SENSITIVE NATURAL COMMUNITIES

Upon review of occurrence data and habitat present, there are 53 sensitive natural communities with potential to occur in the CWHR habitat types present in the project area, which include madrone forest, tanoak forest, redwood forest, hazelnut scrub, red-osier thickets, thimbleberry brambles, Golden chinquapin thickets, and California coffee berry scrub.

Sensitive natural communities were observed during the reconnaissance-level survey, including redwood, madrone, and California bay forest. Not all parts of the project area were observed during the reconnaissance survey so additional sensitive natural communities may be present (including those identified in Table B-1). Implementation of SPR BIO-3 is required to map sensitive natural communities prior to treatment.

Sensitive Habitats

OAK WOODLAND

Coast live oak woodland, interior live oak woodland, and blue oak woodland have been identified (see Table B-1 above) as potentially present in the project area. Treatments have been designed to retain micro stands of oak trees with a cluster radius of approximately 25 feet (50-foot diameter) and to space these micro stands approximately 75-100 feet apart depending on the steepness of slope related to exacerbation of fire behavior or proximity to key infrastructure and assets. If treatment activities within identified oak woodlands cannot be avoided, then Mitigation Measure BIO-3a would apply in these areas.

RIPARIAN HABITAT

The project area contains numerous perennial (Class I) (e.g., Saratoga Creek) intermittent (Class II) and ephemeral (Class III) streams. Riparian habitat is present adjacent to segments of some Class I streams in the project area and may be present along Class II streams. WLPZs ranging from 50 to 100 feet will be established adjacent to all Class I and II streams within the project area. While these measures would reduce potential impacts on riparian habitat, the extent of riparian habitat within the project area has not been mapped and riparian habitat may be present outside of the areas incorporated within WLPZs.

Limited herbicide application is proposed on approximately 11.4 acres of cut stump treatments on invasive exotic eucalyptus trees. In portions of the project area where herbicide application is proposed in riparian habitats or other areas where there is a possibility the herbicide could come in direct contact with water, only herbicides labeled for use in aquatic environments will be utilized. Only hand application of herbicides will be allowed in wetland and riparian habitats and only during low-flow periods or when seasonal streams are dry. No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses.

CHAPARRAL AND COASTAL SCRUB

As described in Table B-3, chaparral habitat (i.e., chamise chaparral and mixed chaparral) and coastal scrub habitat are present in the project area. The project area contains approximately 544 acres of chaparral and 12.3 acres of coastal scrub. There is potential for several Sensitive Natural Communities to occur within the chaparral and coastal scrub habitats in the project area (Table B-1). Pursuant to SPR BIO-3, treatments will be designed to maintain the characteristics and membership rules of any vegetation alliance that is designated as a sensitive natural community. SPR BIO-5 requires avoidance of the environmental effects of type conversion within chaparral and coastal sage scrub and that the habitat function of these communities be maintained. The spatial scale within which the effects of type conversion are evaluated for this project comprises SJW-owned lands within the Los Gatos Creek Watershed. This spatial scale is appropriate because SJW manages over 6,000 acres of land containing over 1,744 acres of chaparral

and coastal scrub habitat within the watershed. This is a substantial landscape scale at which ecologically functional habitat capable of meeting the resource needs of species that rely on these habitats can be maintained within the watershed. A larger landscape scale was not deemed appropriate because SJW does not control the management of habitats outside of their property and therefore has no ability to preserve ecological function of those habitats although, the majority of these outside lands are under various protected status as parks and open space.

Fuel break treatments could permanently remove up to a maximum of 367 acres of chaparral habitat and 4.40 acres of coastal scrub habitat. This constitutes approximately 32 percent of the 1,713 acres of chaparral and 14 percent of the 31.5 acres of coastal scrub within the SJW-owned properties within and surrounding the treatment areas. Therefore, this would not constitute a landscape level conversion of chaparral or coastal scrub habitats to other habitat types because the majority of these habitats would be maintained and there would not be an overall loss of habitat function for these types at the landscape level.

Within the remaining 177 acres of chaparral and 7.93 acres of coastal scrub, which would be subject to ecological restoration treatments, SJW would design treatment types to maintain chaparral and coastal scrub habitat function. This includes maintaining at least 35 percent relative density of chaparral vegetation within ecological restoration treatment areas and implementing maintenance treatments at a frequency that allows regeneration of the characteristic species of each chaparral and coastal sage scrub community. For example, bigberry manzanita (*Arctostaphylos glauca*) is an obligate seeder that requires at least 20 years after fire to establish a sufficient seedbank for regeneration. Therefore, treatments that remove mature, seed producing shrubs at intervals of less than 20 years can deplete the seedbank of bigberry manzanita. Additionally, many obligate seeding chaparral shrubs, like bigberry manzanita, require heat and charate to break seed dormancy and stimulate germination. This ecological process cannot be replicated by mechanical disturbances and therefore, these treatments would not be applied to chaparral vegetation types dominated by bigberry manzanita and other chaparral species that require fire for regeneration, unless prescribed fire can be applied following mechanical treatments, which is not proposed under this project. California sagebrush (*Artemisia californica*) and sage species (*Salvia* spp.) tend to decrease with increased fire return intervals. While these species resprout moderately well after low-intensity fires, they are less likely to survive high intensity fires and other high-intensity disturbances. Sage species generally reestablish successfully from seed following disturbance wile California sagebrush is less likely to successfully establish from seed following high intensity disturbance. All ecological restoration treatments within chaparral and coastal sage scrub communities will be designed to replicate the natural disturbance regime of the vegetation type present.

Due to some chaparral species (i.e., chamise) producing new sprouts from an established lignotuber, treatments within chaparral characterized by this type of species should be designed to maintain the root system and root crown of the dominant chaparral shrubs. Mechanical treatments may include cutting, crushing/compacting, or chopping existing vegetation. Manual treatments may include chipping, lopping and scattering, pruning, and hand cutting of existing vegetation. For both mechanical and manual treatments, chaparral shrubs would not be uprooted during treatments and the root crown would be maintained to allow dominant shrubs with lignotubers to sprout new shoots following treatment.

Treatments within the ecological restoration treatment areas would result in the temporary loss of some chaparral and coastal scrub habitat functions. Chaparral alliances in the ecological treatment areas are composed of a mix of obligate seeders (i.e., non-sprouting) (e.g., bigberry manzanita chaparral), facultative seeders (e.g., leather oak chaparral), and obligate sprouters (brittleleaf manzanita chaparral).

Because the treatments would be designed to maintain 35 percent relative density of chaparral and coastal sage scrub vegetation, replicate the natural disturbance regime of the vegetation type present, and maintain root crowns of resprouting shrubs, ecological function of the chaparral and coastal sage scrub communities within the ecological restoration treatments would be maintained over the long term. For those chaparral communities dominated by obligate seeders, mature nurse shrubs and a mixture of shrubs in all age classes would be maintained to allow for reseeding and regeneration of the characteristic shrub species.

REFERENCES

Bartosh, Heath. Founder, Principal Botanist, Rare Plant Specialist. Nomad Ecology, Martinez, CA. June 2, 2022—email with Heather Blair of Ascent Environmental regarding rare plant surveys in the project area.

Baumstieger, J. and P. B. Moyle. 2019. "*A reappraisal of the California Roach/Hitch (Cypiniformes, Cyprinidae, Hesperoleucus/Lavinia species complex*". Zootaxa 4543 (2):221-240. Available: https://mwfb.ucdavis.edu/sites/g/files/dgvnsk1266/files/inline-files/38102.pdf. Accessed July 2022.

CAL FIRE. *See* California Department of Forestry and Fire Protection.

Calflora. 2022. Information on Wild California plants. Available: https://www.calflora.org/search.html. Accessed June 2022.

Cal Herps. *See* CaliforniaHerps.com.

California Consortium of Herbaria 2. 2022. CCH2 data portalhttps://cch2.org/portal/index.php. Accessed June 2022.

CaliforniaHerps.com. 2022a. California Herps - A Guide to the Amphibians and Reptiles of California. Species Account for California Giant Salamander – *Dicamptodon ensatus*. Available: http://www.californiaherps.com/salamanders/pages/d.ensatus.html. Accessed: June 2022.

———. 2022b. California Herps - A Guide to the Amphibians and Reptiles of California. Species Account for California Newt - *Taricha torosa*. Available: http://www.californiaherps.com/salamanders/pages/t.torosa.html. Accessed: June 2022.

———. 2022c. California Herps - A Guide to the Amphibians and Reptiles of California. Species Account for Northern Legless Lizard – *Anniella pulchra*. Available: http://www.californiaherps.com/lizards/pages/a.pulchra.html. Accessed: May 2022.

California Department of Fish and Wildlife. 2013 (March). *Report to the Fish and Game Commission, Evaluation of the Petition from the Center for Biological Diversity to List Townsend's Big-Eared Bat (Corynorhinus townsendii) as Threatened or Endangered Under the California Endangered Species Act*.

———. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Accessed June 2022.

———. 2019 (April 4). *Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumble Bees as Endangered Under the California Endangered Species Act*. Report to the Fish and Game Commission.

———. 2022. California Natural Community List. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline. Accessed June 2022.

California Department of Forestry and Fire Protection. 2017. Fire Resource and Assessment Program (FRAP) California's Forests and Rangelands: 2017 Assessment. Available: https://frap.fire.ca.gov/media/4babn5pw/assessment2017.pdf. Accessed June 2022.

California Native Plant Society. 2022a. *A Manual of California Vegetation* Online. Available: http://vegetation.cnps.org/. Accessed June 2022.

———. 2022b. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available: http://www.rareplants.cnps.org. Accessed May 27, 2022.

California Natural Diversity Database. 2022a. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed: May 27, 2022.

———. 2022b. California Fish Passage Database [ds69]. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed; June 13, 2022.

———. 2022c. California Tiger Salamander Central Valley Distinct Population Segment Range [ds85]. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed; June 17, 2022.

———. 2022d. Yellow-Breasted Chat Range [ds1637]. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed; June 24, 2022.

California Wildlife Habitat Relationship System. 2008. San Joaquin kit fox *(Vulpes macrotis muctica)* Range. California Department of Fish and Wildlife, California Interagency Wildlife Task Group. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68679. Accessed June 2022.

———. 2011. Swainson's Hawk (*Buteo swainsoni*) Range. California Department of Fish and Wildlife, California Interagency Wildlife Task Group. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1674&inline=1. Accessed June 2022.

CBD. *See* Center for Biological Diversity.

CCH2. *See* California Consortium of Herbaria 2.

CDFW. *See* California Department of Fish and Wildlife.

Center for Biological Diversity, Center for Food Safety, Xerces Society, and L. Brower. 2014. *Petition to Protect the Monarch Butterfly (Danaus plexippus plexippus) under the endangered species act*.

CWHR. *See* California Wildlife Habitat Relationships System.

CNDDB. *See* California Natural Diversity Database.

CNPS. *See* California Native Plant Society.

Dudek. 2020 (April). *Results of Spring and Fall Habitat Assessments and Species Surveys, and Hydrology and Water Quality Evaluations Conducted in 2019 for the Nine Diversions for the Raw Water Intake Bypass Flow Study*. Prepared for: San Jose Water Company.

Halbert. P., and S. W. Singer. 2017. *Marbled Murrelet Landscape Management Plan for Zone 6*. California Department of Parks and Recreation, Santa Cruz District. Felton, CA.

Jepson Flora Project (eds.). 2022. Jepson eFlora, Available: https://ucjeps.berkeley.edu/eflora/. Accessed: June 2022.Levine, L.M., McEachern, A.K., and C. Cowan. 2008. Rainfall Effects on Rare Annual Plants. *Journal of Ecology*. 96(4), 794-806.

Kim, R., B. Halstead, G. D. Wylie, and M. L. Casazza. 2018. *"Distribution and Demography of San Francisco Gartersnakes (*Thamnophis sirtalis tetrataenia*) at Mindego Ranch, Russian Ridge Open Space Preserve, San Mateo County California."* U.S. Geological Survey, Reston, VA.

Levine, J. M., A. K. McEachern, and C. Cowan. 2008. "Rainfall Effects on Rare Annual Plants". *Journal of Ecology* 96: 795 –806.

Midpeninsula Regional Open Space District. 2021 (November). "*Alma Bridge Road-Related Mortality Study*" Prepared by: H.T. Harvey and Associates. Los Gatos, CA.

MROSD. *See* Midpeninsula Regional Open Space District.

Pacific Veg Map. 2022. Land Cover and Fuels Data and Downloads. Available: https://pacificvegmap.org/data-downloads/. Accessed June 2022.

Santa Cruz County *See.* Santa Cruz County Planning Department

Santa Cruz County Planning Department. 2011. Map of Sandhills Distribution in Santa Cruz County.

Smith, J. J. 2013. "*Northern Santa Clara County Fish Resources*." San Jose State University, Department of Biological Sciences. San Jose, CA.

Swan, Robynn. Senior Environmental Scientist (Specialist), Timberland Conservation Program – Vegetation Management. California Department of Fish and Wildlife – Bay Delta Region. November 2, 2022—email with Heather Blair of Ascent Environmental regarding recent listing status update to bumble bees in California.

U.S. Fish and Wildlife Service. 2007. "*Species Account. San Francisco Garter Snake. Thamnophis sirtalis tetrataenia.*" Sacramento Fish and Wildlife Office, Sacramento California. October 2007.

———. 2022. National Wetlands Inventory. Available: https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper. Accessed June 2022.

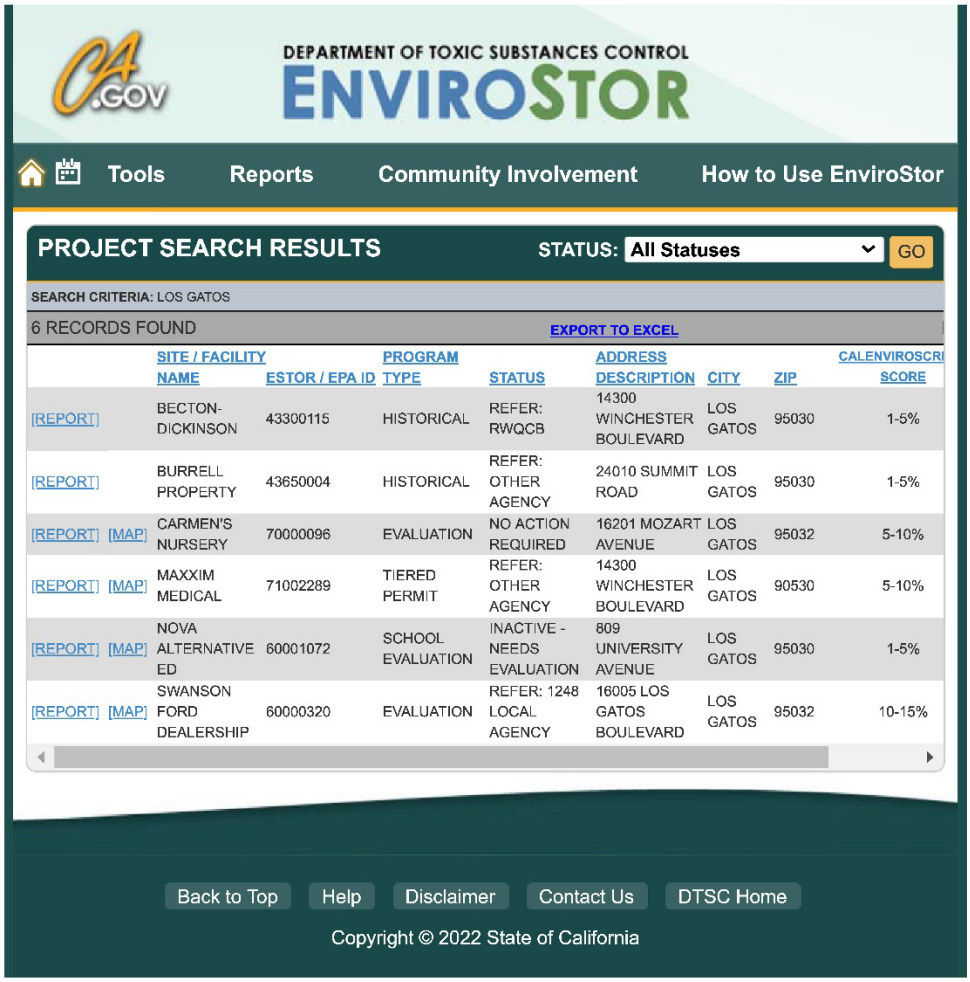
USFWS See. U.S. Fish and Wildlife Service.

Western Milkweed Mapper. 2022. Data accessed from the Western Monarch Milkweed Mapper, a project by the Xerces Society, U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and Washington Department of Fish and Wildlife. Available: www.monarchmilkweedmapper.org. Accessed: 06/20/2022

Yovovich, V., M. L. Allen, L. T. Macaulay, C. C. Wilmers. 2020. "Using Spatial Characteristics of Apex Carnivore Communication and Reproductive Behaviors to Predict Responses to Future Human Development". *Biodiversity and Conservation*. 29:2589–2603.

Attachment C

Hazardous Materials



DEPARTMENT OF TOXIC SUBSTANCES CONTROL
ENVIROSTOR

Tools Reports Community Involvement How to Use EnviroStor

PROJECT SEARCH RESULTS

STATUS: All Statuses GO

SEARCH CRITERIA: LOS GATOS

6 RECORDS FOUND EXPORT TO EXCEL

		SITE / FACILITY NAME	ESTOR / EPA ID	PROGRAM TYPE	STATUS	ADDRESS DESCRIPTION	CITY	ZIP	CALENVIROSCR SCORE
[REPORT]		BECTON-DICKINSON	43300115	HISTORICAL	REFER: RWQCB	14300 WINCHESTER BOULEVARD	LOS GATOS	95030	1-5%
[REPORT]		BURRELL PROPERTY	43650004	HISTORICAL	REFER: OTHER AGENCY	24010 SUMMIT ROAD	LOS GATOS	95030	1-5%
[REPORT]	[MAP]	CARMEN'S NURSERY	70000096	EVALUATION	NO ACTION REQUIRED	16201 MOZART AVENUE	LOS GATOS	95032	5-10%
[REPORT]	[MAP]	MAXXIM MEDICAL	71002289	TIERED PERMIT	REFER: OTHER AGENCY	14300 WINCHESTER BOULEVARD	LOS GATOS	90530	5-10%
[REPORT]	[MAP]	NOVA ALTERNATIVE ED	60001072	SCHOOL EVALUATION	INACTIVE - NEEDS EVALUATION	809 UNIVERSITY AVENUE	LOS GATOS	95030	1-5%
[REPORT]	[MAP]	SWANSON FORD DEALERSHIP	60000320	EVALUATION	REFER: 1248 LOCAL AGENCY	16005 LOS GATOS BOULEVARD	LOS GATOS	95032	10-15%

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5.859375E-02 seconds

Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit

County	City	Region	SWAT R	Waste Discharge System No.	Solid Waste ID No.	Waste Management Unit Name	Facility Name	Agency Name
Del Norte	Crescent City	1	2	1A880520NSL-01		Del Norte County- Pesticide Storage	Del Norte Pesticide Storage AR	Del Norte, County of
Contra Costa	Pittsburg	2	1	2 071059002-02	07-A1-0001	U.S. Steel Corp.-Pittsburg Site LA	WDR-USS-POSCO	USS-POSCO
Solano	Vallejo	2	1	2 482011003-01	48-AA-0008	US Navy Mare Island Sanitary Landfill	WDR-Naval Shipyard/Class I LAN	Mare Island Naval Shipyard
Contra Costa	Richmond	2	3	2 071007002-01		Chevron Chemical Company-Old Sites	WDR-Ortho DIV-Richmond Plant	Chevron Chemical Company
Monterey	Fort Ord (Marina)	3	1	3 270301004-01	27-AA-0015	Fort Ord Landfill	Sanitary Landfill	U.S. Army, Fort Ord
Santa Barbara	Lompoc	3	3	3 420305001-01	42-AA-0017	Lompoc City Landfill	Solid Waste Disposal Site	Lompoc City
Los Angeles	Monterey Park	4	1	4B190332001-01	19-AM-0001	Operating Industries Landfill	Operating Industries, Inc.	Operating Industries, Inc.
Tulare	Woodlake	5F	1	5D540300010-01	54-AA-0007	Tulare County-Woodlake Landfill	Woodlake SWDS	Tulare, County of
Fresno	Fresno	5F	2	5D100300001-01		Mckinley Ave. Yard	T.H. Agriculture and Nutrition	North American Phillips
Kings	Corcoran	5F	2	5D160302001-01	16-AA-0011	Kings County-Corcoran Landfill	Corcoran SWDS	Kings County Waste Mgmt Auth.
Fresno	Fresno	5F	3	5D100319001-01	10-AA-0013	Orange Avenue Disposal Company	Orange Avenue Landfill	Orange Avenue Disp Co. Inc
Tulare	Exeter	5F	3	5D540300003-01	54-AA-0002	Tulare County-Exeter Disposal Site	Exeter SWDS	Tulare, County of
Merced	Atwater	5F	4	5C240115001-01		Atwater City	Bert Crane Road Landfill	Atwater, City of
Fresno	Fowler	5F	5	5D100325N01-01		Fowler City	Fowler City Landfill (Old)	Fowler, City of
Butte	Oroville	5R	2	5A042005001-01		Koppers Company-Oroville Site	Koppers Wood Preserving ISW	Koppers Industries Inc.
Butte	Chico	5R	4	5A040302N01-01		Chico City Burn Dump	Humboldt Road Landfill	Chico, City of
Sacramento	Sacramento	5S	1	5A340700003-01	34-AA-0008	US Air Force-McClellan AFB	Landfill Class III Site 8 (Closure)	US Air Force-McClellan AFB
Sacramento	Mather (Rancho Cordova)	5S	2	5A340700001-01		US Air Force-Mather Field Landfill	Mather AFB Environmental Mgmt	US Air Force – Mather AFB
Sacramento	Sacramento	5S	3	5B342000N01-01		Sacramento Army Depot	Sacramento Army Depot	U.S. Army
San Joaquin	Stockton	5S	3	5 390002NUR-01	39-AA-0006	US Navy Communications Landfill	U.S.N. Communication STA. Landf	U.S. Navy Communications
San Joaquin	French Camp	5S	3	5 390003NUR-01		US Army-Sharpe Army Depot	US Army-Sharpe Army Depot	US Army
San Joaquin	Tracy	5S	5	5 390006NUR-01		Site 300 (Other 39 WMUS)	Lawrence Livermore Lab	Lawrence Livermore Labs
Inyo	Keeler	6V	1	6B142000041-01	14-AA-0008	US Tungsten Owens Lake Landfill	Owens Lake Landfill	Umetco Minerals Corporation
Orange	Fullerton	8	1	8300002NUR-01		Mccoll Site	Mccoll Sludge Disposal Site	Toxic Substances Control Divis
Riverside	Riverside	8	1	8 330325001-01		Stringfellow Quarry Acid Pits	State of California-Stringfellow	Toxic Program Management Sect