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Project-Specific Analysis/Addendum

# **Sanborn and Upper Stevens Creek County Parks Forest Health Plan**

**Project ID: 2022-17**

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**MAY 2023**

*Prepared for:*

**SANTA CLARA COUNTY PARKS**

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**ATTACHMENTS**

- A Standard Project Requirements and Mitigation Measures Checklist
- B Project-Specific CEQA Findings and Statement of Overriding Considerations
- C Cultural Resources Survey Report
- D Biological Technical Memo
- E Soils Report



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# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CAL FIRE	California Department of Forestry and Fire Protection
CaIVTP	California Vegetation Treatment Program
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CHRIS	California Historic Resources Information Center
ESA	federal Endangered Species Act
GHG	greenhouse gas
MM	mitigation measure
NAHC	Native American Heritage Commission
PEIR	Program Environmental Impact Report
PSA	Project-Specific Analysis
SCC	Santa Clara County
SCCFD	Santa Clara County Fire Department
SCC Parks	Santa Clara County Parks and Recreation Department
SENL	single event noise level
SLF	Sacred Land Files
SPR	standard project requirement
USFWS	U.S. Fish and Wildlife Service
VAFB	Vandenberg Air Force Base
VMT	vehicle miles traveled
WLPZ	Watercourse and Lake Protection Zone
WUI	Wildland Urban Interface

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# 1 Introduction

Santa Clara County Parks and Recreation Department (SCC Parks; project proponent) has prepared the Sanborn-Upper Stevens Creek County Parks Forest Health Plan (Forest Health Plan; FHP) (Dudek 2023), which was developed to guide forest management activities at Sanborn County Park and Upper Stevens Creek County Park. The Forest Health Plan is being finalized concurrently with this Project Specific Analysis/Addendum. The Forest Health Plan identifies general practice and project-specific management recommendations to address forest threats in both Parks and acknowledges that trees, vegetation, and forest threats are dynamic, and their management necessitates an adaptive management approach. The Forest Health Plan also identifies Best Management Practices (BMPs) to be implemented during operations and maintenance activities and during implementation of recommended projects to reduce or avoid impacts to Park resources.

SCC Parks proposes to implement the recommended projects identified in the Forest Health Plan. The recommended projects consist of vegetation treatment activities on approximately 1,188 acres within Sanborn County Park and approximately 179 acres within Upper Stevens Creek County Park (for a total of 1,367 treatment acres) to reduce wildfire risk and achieve other forest health benefits (project) (Project ID 2022-17). The project is composed of recommended treatment areas identified in the FHP across both parks, and approximately 268 acres (Treatment Areas 6A, 6B and 6C) that are grant funded through CAL FIRE's California Climate Investments (CCI) Forest Health Grant Program and would be implemented first. Some of these granted funded treatment acres overlap with the recommended treatment areas identified in the FHP. As such, treatment activities would occur on a total of 1,109 acres. The vegetation treatment prescriptions recommended in the FHP would be implemented over a 10-year timeframe. However, the Forest Health Plan was designed to be a dynamic document that may be updated over time and the planning horizon for the Forest Health Plan is 20 years. As such, the management practices and guidelines outlined in the Forest Health Plan are intended to be implemented over the next 20 years. Any new treatment areas identified in subsequent updates to the Forest Health Plan would require additional CEQA review under the CalVTP.

The proposed treatments include implementation of shaded fuel breaks and ecological restoration (wildfire resiliency projects) through a mixture of hand and mechanical treatment techniques as well as prescribed burning/controlled burning (both pile burning and broadcast burning). The treatments would increase fire resiliency in the region that was impacted by the 2020 CZU Lightning Complex Fire, which occurred 4 miles west of the project site.

Vegetation treatment activities would occur on County property in unincorporated Santa Clara County (see Figure 1, Project Location, and Figure 2, Project Site). Santa Clara Fire Safe Council is administering the grant and allocating funds to implement the proposed vegetation treatments and related work. Treatment activities in the remaining treatment areas would be implemented as funds are identified over the next 10 years.

## 1.1 California Environmental Quality Act

Serving as the lead agency under the California Environmental Quality Act (CEQA), SCC Parks must comply with CEQA prior to implementing the proposed vegetation treatment activities. SCC Parks has evaluated the proposed treatments for CEQA compliance as later activities covered by CAL FIRE's California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR), using the Project-Specific Analysis (PSA) checklist herein. Consistent with CEQA Guidelines Section 15168(c)(2), if the potential environmental impacts of a proposed

vegetation treatment project are determined to be covered by the environmental impacts analyzed in the PEIR, the project may be approved using a finding that the project is within the scope of the PEIR. Such a finding would constitute CEQA compliance under the PEIR. The PEIR identified the range of environmental impacts associated with vegetation treatment projects and required implementation of standard project requirements (SPRs) and mitigation measures (MMs) to address and minimize these impacts. In accordance with the PEIR, all relevant SPRs and MMs would be incorporated into the project. Under CEQA, no additional review is required for a project that is consistent with the PEIR.

The PEIR is available for public review at <https://bof.fire.ca.gov/projects-and-programs/calvtp/peir-certification/>.

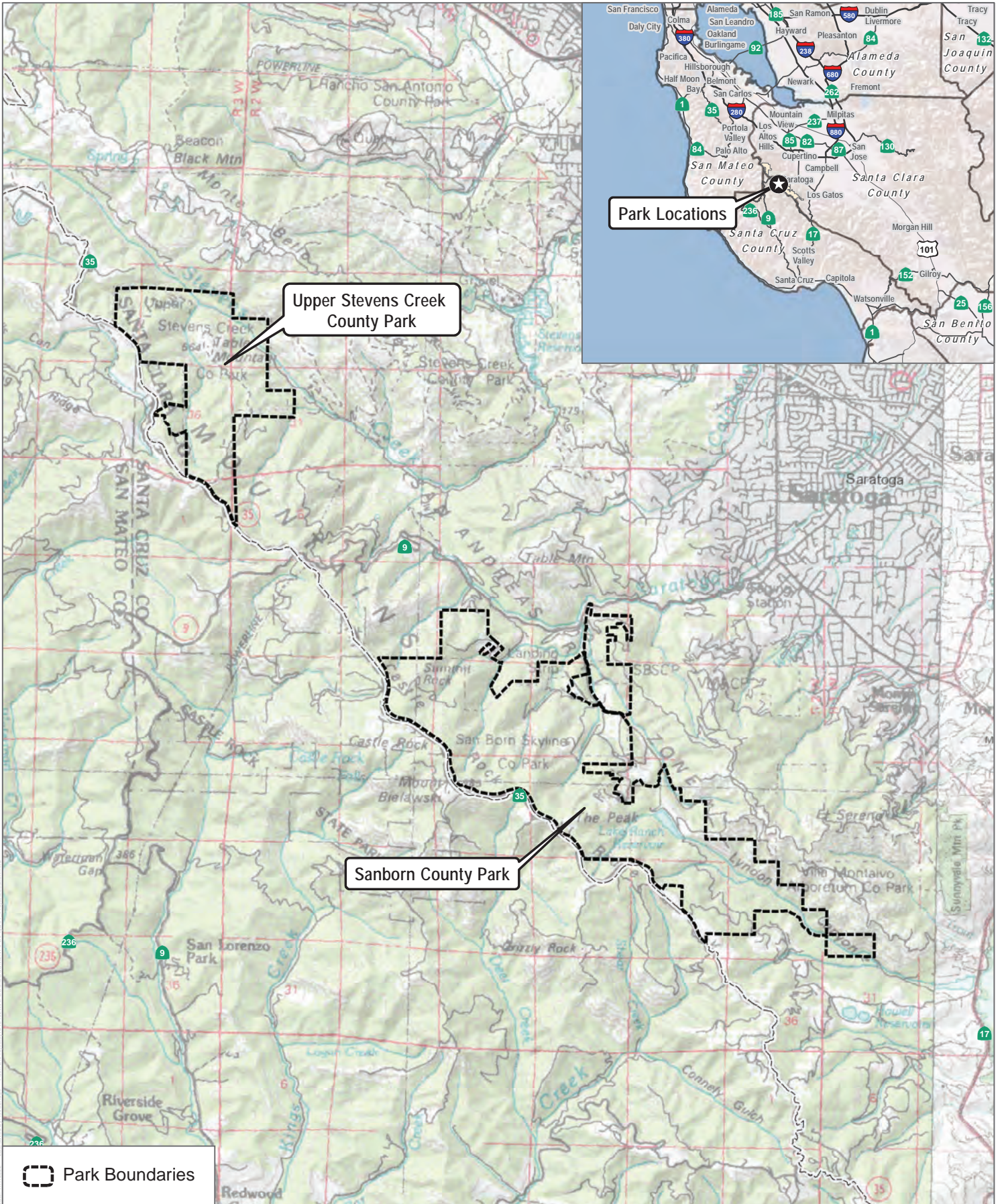
This document serves as a PSA/Addendum to evaluate whether the proposed project is within the scope of the CalVTP PEIR. Proposed treatment projects qualifying as within the scope of the PEIR must be consistent with the treatment types and treatment activities covered in the CalVTP and the geographic extent of the CalVTP treatable landscape. As further discussed in Section 2, Project Description, the proposed treatment types and treatment activities are consistent with the CalVTP PEIR. Figures 3-1 through 3-3 present the proposed treatment areas. Nearly the entirety of both parks is mapped as treatable landscape by the CalVTP PEIR, and the majority of the proposed treatment areas are located within the CalVTP treatable landscape. Approximately 1,081 acres of proposed treatments are within the CalVTP treatable landscape, while approximately 28 acres of the proposed treatment areas are in areas that were not modeled as CalVTP treatable landscape. However, these areas are dispersed in small sections of treatment areas (see Figures 4-1 through 4-3, CalVTP Treatable Landscape).

Consistent with CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168, 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 (PRC Section 21166; 14 CCR 15162–15164 and 15168). For the proposed project, the inclusion of areas outside the CalVTP treatable landscape represent a revision or change to the CalVTP. Because the project has aspects that represent a change to the PEIR, an Addendum to the EIR has been prepared.

The CalVTP treatable landscape was modeled using desktop applications to exclude certain vegetation types (e.g., wetlands), apply buffers around geographic and topographic features, and demarcate jurisdictional boundaries (e.g., State Responsibility Area and Local Responsibility Area), which resulted in some disjointed and scattered treatable landscape areas. Therefore, areas where proposed treatment activities extend outside of the treatable landscape are largely due to these modeling results, and if the areas of the proposed project outside of the CalVTP treatable landscape have essentially the same, or substantially similar, landscape conditions and vegetation cover as the adjacent areas within the treatable landscape, the environmental analysis in the PEIR would be applicable, and an Addendum to the PEIR is appropriate.

The project-specific mitigation monitoring and reporting program, which identifies the CalVTP SPRs and MMs applicable to the proposed project, is included as Attachment A. The SPRs identified in Attachment A have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.





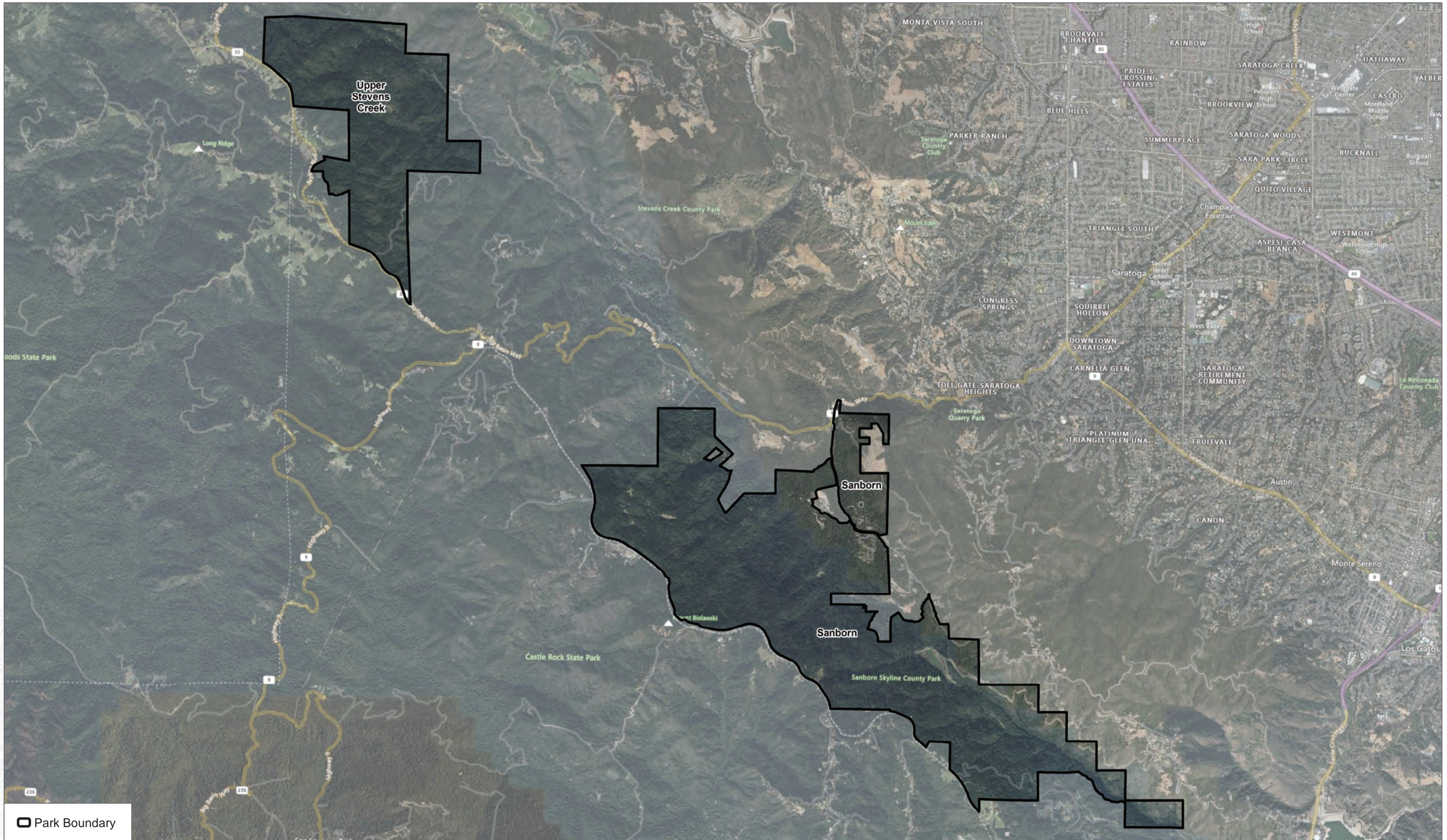
SOURCE: USGS 2020



**FIGURE 1**  
**Project Location**  
 Sanborn and Upper Stevens Creek Forest Management Plan

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SOURCE: Bing Maps 2021, Santa Clara County 2022

**FIGURE 2**  
Project Site



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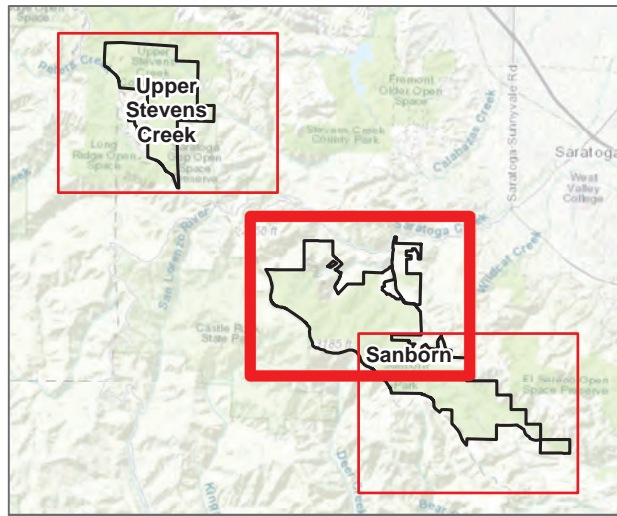




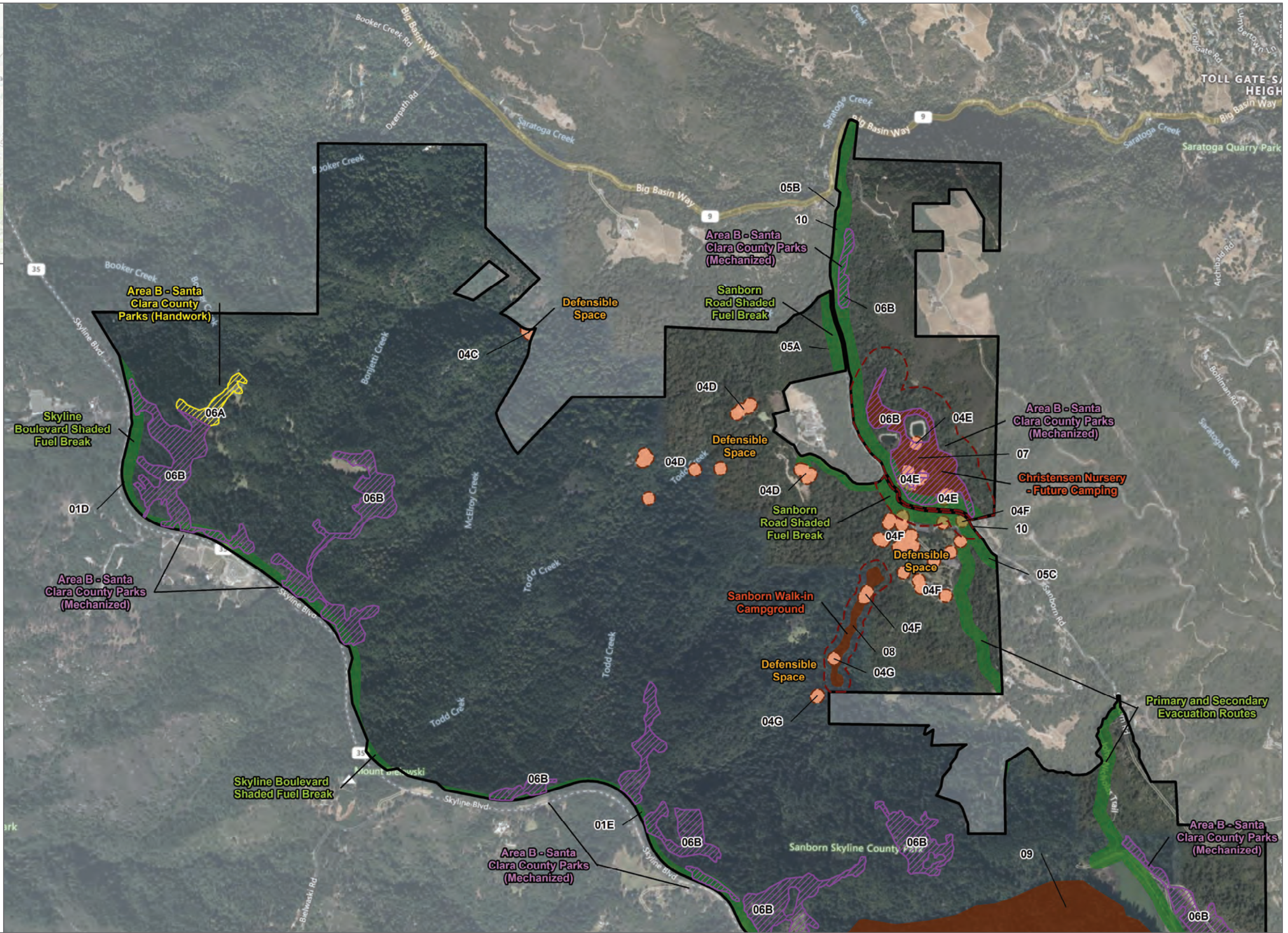


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- Park Boundary
- Grant Projects**
- Fuels Reduction
- Fuels Reduction
- Recommended Projects**
- Fuel Break - Defensible Space (Mechanical / Manual)
- Fuel Break - Shaded Fuel Break (Mechanical / Manual)
- Fuels Reduction (Mechanical / Manual)
- 100-foot Campground Buffer (Mechanical / Manual)



SOURCE: Bing Maps 2021, Santa Clara County 2022

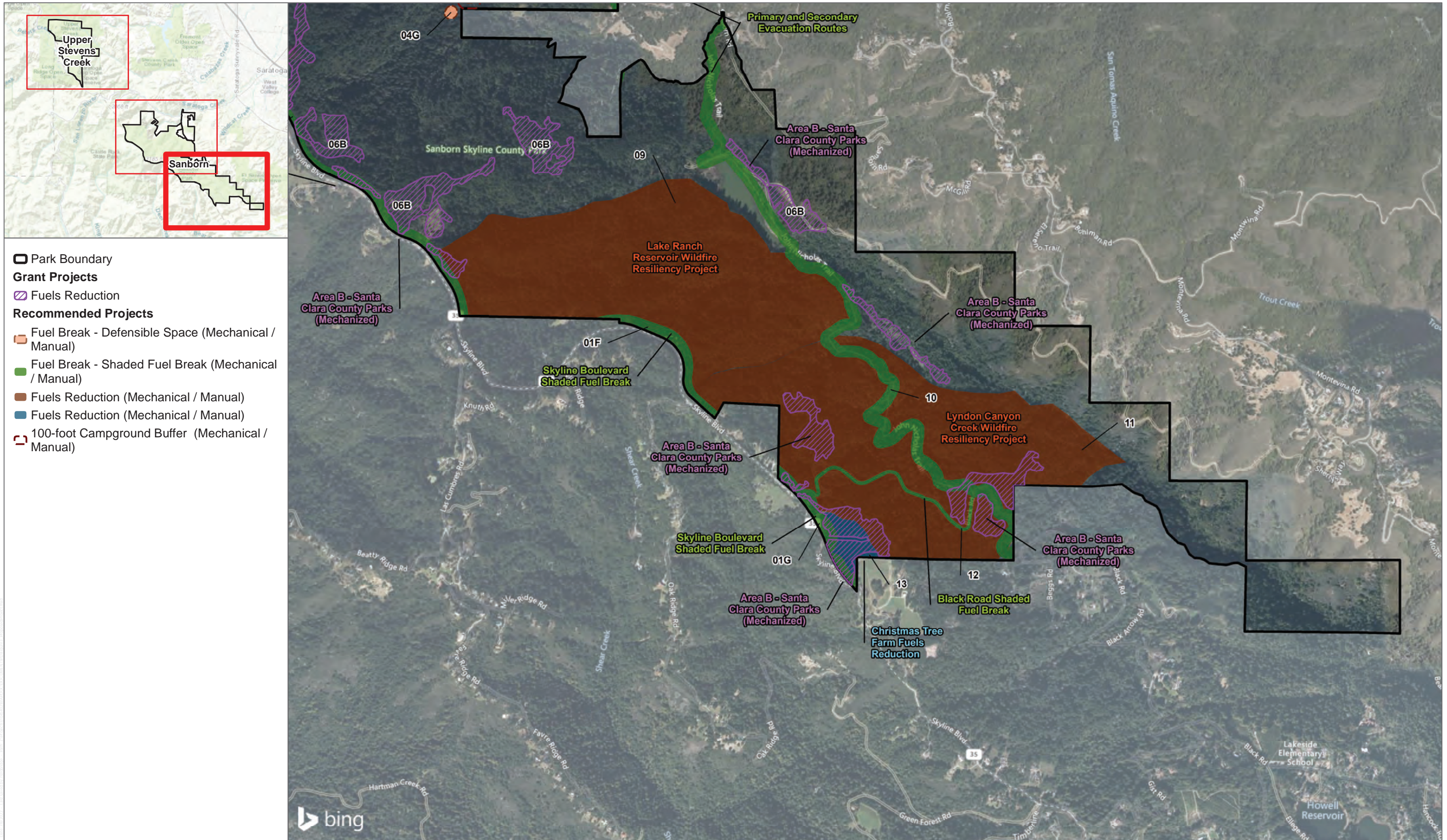


FIGURE 3-2  
Proposed Project  
Sanborn and Upper Stevens Creek Forest Management Plan



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SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 3-3

Proposed Project

Sanborn and Upper Stevens Creek Forest Management Plan



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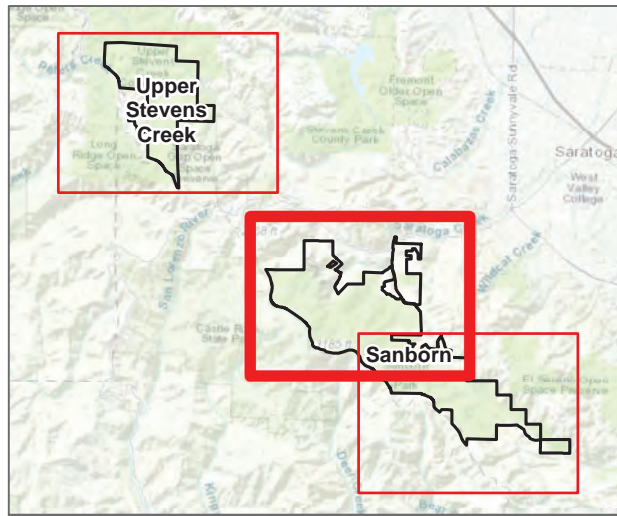




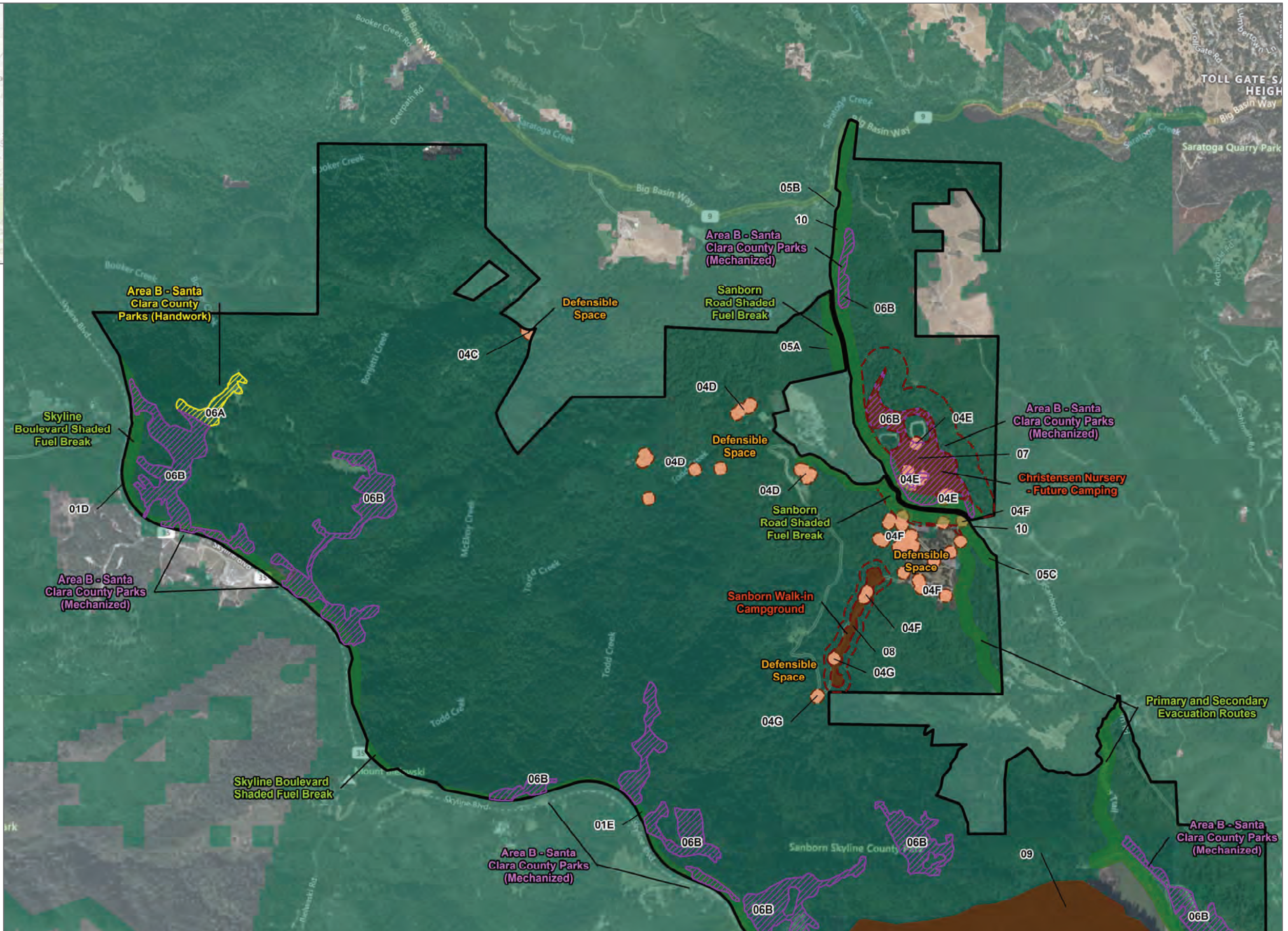


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- Park Boundary
- CalVTP Treatable Area
- Grant Projects**
- Fuels Reduction
- Fuels Reduction
- Recommended Projects**
- Fuel Break - Defensible Space (Mechanical / Manual)
- Fuel Break - Shaded Fuel Break (Mechanical / Manual)
- Fuels Reduction (Mechanical / Manual)
- 100-foot Campground Buffer (Mechanical / Manual)



SOURCE: Bing Maps 2021, Santa Clara County 2022

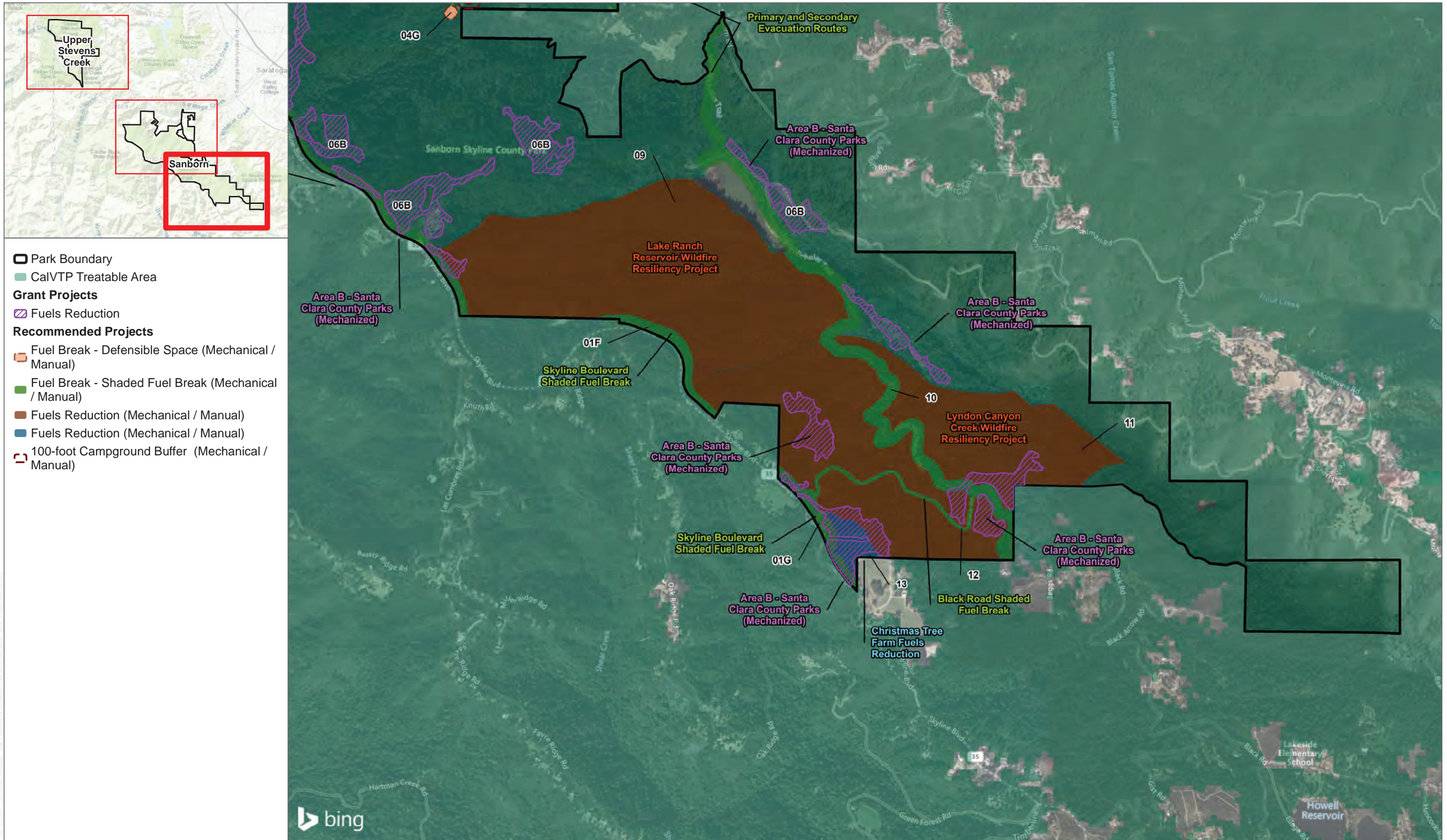


**FIGURE 4-2**  
 CalVTP Treatable Landscape  
 Sanborn and Upper Stevens Creek Forest Management Plan



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SOURCE: Bing Maps 2021, Santa Clara County 2022



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## 2 Project Description

Santa Clara County Parks proposes to implement the Forest Health Plan, and more specifically, implement the recommended projects identified in Figures 12 and 13 in Chapter 7 of the Forest Health Plan. The Forest Health Plan proposes to implement vegetation treatment activities on approximately 1,188 acres within Sanborn County Park and approximately 179 acres within Upper Stevens Creek County Park, for a total of 1,367 treatment acres. The project is composed of recommended treatment areas identified in the FHP and approximately 268 acres (Treatment Areas 6A, 6B and 6C) that are grant funded through CAL FIRE's California Climate Investments (CCI) Forest Health Grant Program and would be implemented first. Some of these granted funded treatment acres overlap with the recommended treatment areas identified in the FHP. As such, actual treatment acres are a total of 1,109 acres.

Recommended projects identified in the Forest Health Plan are intended to reduce flammable vegetation; improve environmental conditions (e.g., forest health); provide defensible space to existing and proposed campgrounds; and provide strategic locations where firefighting ground and air resources can gain access and provide firefighters the ability to safely reduce the intensity of, slow down, or stop the spread of a wildfire that may threaten the area. This would be achieved by reducing, thinning, or removing mature fuel and dead/downed fuels, creating defensible space buffers and shaded fuel breaks along primary and secondary evacuation routes. Vegetation treatments would be implemented using manual and mechanical treatments, as well as prescribed burning.

The project-specific mitigation monitoring and reporting program, which identifies the CalVTP SPRs and MMs applicable to the proposed project, is included as Attachment A. The SPRs identified in Attachment A have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

Attachment B contains the project-specific CEQA findings and Statement of Overriding Considerations.

### 2.1 Project Location

The Project site is within the Sanborn and Upper Stevens Creek County Parks in Santa Clara County. These parks are approximately 14 miles west of San Jose in the Santa Cruz Mountain Range. Sanborn Park is situated between Skyline Boulevard (State Route 35) to the west and the City of Saratoga to the east. Upper Stevens Creek Park is approximately 7 miles northwest of Sanborn County Park. Both parks are within a network of adjacent open spaces and preserves. Upper Stevens Creek Park is bordered by Monte Bello Open Space Preserve to the north, Saratoga Gap Open Space Preserve to the south, and Long Ridge Open Space preserve to the west (Figure 1, Project Location, and Figure 2, Project Site). Both parks provide recreational opportunities such as multi-use trails, camping, and day use areas.

### 2.2 Project Characteristics

The recommended projects identified in the Forest Health Plan consist of shaded fuel breaks and ecological restoration treatment types, and would be implemented using mechanical, manual, and prescribed burning (pile and broadcast) treatment activities. Table 1 provides further details on the extent of each treatment type and treatment activity within the parks. Treatment activities would be implemented according to the best management practices identified in the Forest Health Plan. These strategic treatments would help to reduce fire intensity during

wildfires in areas directly adjacent to recreational values and in areas where firefighting resources can safely engage in suppression operations.

**Table 1. Proposed Project Treatment Areas**

Acres	Map ID	Project Name	Treatment Type	Treatment Activities	Park
9.842239574	01A	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
1.479493182	01B	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
14.65695307	01C	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
26.35143192	01D	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
19.66311927	01E	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
9.774791219	01F	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
9.605613121	01G	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
42.67615527	02	Table Mountain Christmas Tree Farm	Ecological Restoration	Mechanical, Manual	Upper Stevens Creek
8.687944617	03A	Charcoal Road-Table Mountain Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
38.89136568	03B	Charcoal Road-Table Mountain Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
0.718097708	04A	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
0.718097719	04B	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
0.628070782	04C	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
7.163833959	04D	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
5.20547116	04E	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
13.12953363	04F	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
1.575137313	04G	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
5.30339426	05A	Sanborn Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
33.05831567	05B	Sanborn Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn

**Table 1. Proposed Project Treatment Areas**

Acres	Map ID	Project Name	Treatment Type	Treatment Activities	Park
10.52052576	05C	Sanborn Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
5.18626208	06A*	Los Gatos Creek Watershed Collaborative Forest Health Grant - Area B - Santa Clara County Parks	Ecological Restoration/Shaded Fuel Break	Manual	Sanborn
201.6065789	06B*	Los Gatos Creek Watershed Collaborative Forest Health Grant - Area B - Santa Clara County Parks	Ecological Restoration/Shaded Fuel Break	Mechanical, Manual	Sanborn
61.38398761	06C*	Los Gatos Creek Watershed Collaborative Forest Health Grant - Area B - Santa Clara County Parks	Ecological Restoration/Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
25.30622433	07	Christensen Nursery - Future Camping	Shaded Fuel Break	Mechanical, Manual	Sanborn
36.16685703	07	Christensen Nursery - Future Camping - 100-foot Buffer	Shaded Fuel Break	Mechanical, Manual	Sanborn
6.553948044	08	Sanborn Walk-in Campground	Shaded Fuel Break	Mechanical, Manual	Sanborn
10.09796394	08	Sanborn Walk-in Campground - 100-foot Buffer	Shaded Fuel Break	Mechanical, Manual	Sanborn
312.1168442	09	Lake Ranch Res Wildfire Resiliency Project	Ecological Restoration	Mechanical, Manual	Sanborn
101.3565149	10	Primary and Secondary Evacuation Routes	Shaded Fuel Break	Mechanical, Manual	Sanborn
330.1196258	11	Lyndon Canyon Creek Wildfire Resiliency Project	Ecological Restoration	Mechanical, Manual	Sanborn
7.968178256	12	Black Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
9.815362543	13	Christmas Tree Farm Fuels Reduction	Ecological Restoration	Mechanical, Manual	Sanborn

## Access

Project employees and transport of equipment would use State Route 35, State Route 9, Sanborn Road, and Black Road to access Sanborn Park. Upper Stevens Creek Park will be accessed from Skyline Boulevard (State Route 35) and Charcoal Road. No new roads are proposed. The Project would be accessed from public and Santa Clara County Parks roads. The Project would not include access agreements for private roads.

## Biomass Disposal

Biomass would be managed by mastication, chipping, and removal to regional composting or biomass processing facilities, or burned in air curtain burners or pile burning. In some cases, logs may be stored temporarily on site prior to transport to biomass facilities. For biomass disposal consisting of chipping and spreading on site, chips would not exceed an average of 6 inches.

## Equipment and Crews

Equipment needed to implement manual treatments would include hand-operated tools, such as chainsaws and pole saws, as well as trucks and personal vehicles for transport of crews and equipment. Chippers would be used to assist with manual treatments and would be staged on existing access roads, outside of steep-slope areas. For mechanical treatments, the Project would involve use of hand crews in combination with heavy equipment, including masticators, feller-bunchers, skidders, track-mounted chippers, and grinders. Crew sizes would vary based on land cover, terrain, and treatment activities. It is anticipated that crew sizes would range from 12 to 24 crew members per project. Crews would consist of private contractors, Santa Clara County Parks staff, local fire agencies, tribal groups, or combinations of existing labor sources. In some instances, California Department of Forestry and Fire Protection (CAL FIRE) crews and/or private contractors may be used for fuel break construction and maintenance. Local FireSafe councils may also implement fuel reduction projects.

## Project Timeline

Implementation of the recommended projects identified in the Forest Health Plan would occur over an approximately 10-year period, beginning as early as spring 2023.

## 2.3 Treatment Description

As shown in Figures 3-1 through 3-3, Proposed Project, and presented in Table 1, the Project is composed of multiple treatment areas. Treatment areas were identified due to varying conditions and to allow versatility of implementation based on site-specific requirements and conditions.

Treatment types proposed are consistent with the PEIR and include ecological restoration and fuel breaks, as follows:

- **Shaded Fuel Break Treatments.** Fuel breaks would consist of shaded fuel breaks around primary/secondary evacuation routes and other roads, existing and proposed campgrounds, recreational resources, and structures. No non-shaded (vegetation free) fuel breaks are proposed. Fuel breaks would increase the horizontal spacing between retained vegetation, increase the vertical separation between surface fuels and overstory tree canopies, and modify surface fuels (grasses, shrubs, debris) to reduce fire



intensity and flame lengths. Recommended fuel breaks would vary in total width depending on terrain, vegetation, and proximity to developed uses, and may range from 20 to 400 feet. It is anticipated that maintenance of shaded fuel breaks would be necessary every 2-3 years, although conditions may warrant maintenance more often.

- **Ecological Restoration Treatments.** Ecological restoration treatments would address overall forest health, increasing tree vigor, reducing susceptibility to pests and pathogens, increasing tolerance to drought and climate change, and reducing the threat of high-severity wildfire. Treatments would consist of selective thinning and removal of mid- to large-diameter noncommercial trees affected by sudden oak death and/or large-diameter Douglas fir trees overtopping sensitive hardwood and brush species. Ecological restoration treatments would include understory thinning, mastication of trees up to ~8 inches in diameter, removal of dead and dying trees, and control of invasive species (where present), selective tree removal to maintain clearance between the former tree farm and adjacent native forest and to maintain clear corridors through the plantation for emergency vehicle access. Targeted removal of select farmed trees is also recommended to promote growth of native tree species. These treatments and maintenance treatments would be implemented over time to promote the reestablishment of native tree species.

The long-term goal is to return these forested stands to a condition with an increasingly diverse and regenerative forest, vigorous with larger trees, and increased the spacing between tree crowns and understory vegetation, through the use of prescribed fire as well as mechanical and manual vegetation management techniques. Selective thinning, treatment of understory vegetation (ladder fuels), removal of dead and dying trees, and control of invasive species (where applicable) would be integrated into treatment prescriptions.

The proposed treatment activities would be consistent with the PEIR and include manual treatments, mechanical treatments, and prescribed burning (pile and broadcast burning). Best management practices discussed in the Forest Health Plan would be implemented, as would Standard Project Requirements (SPRs) outlined in the PEIR.

- **Mechanical Treatments:** Mechanical treatments proposed under the Forest Health Plan include the use of masticators, tractors, chippers, grinders, skidder, and cable yarding systems.
- **Manual Treatments:** Manual treatments proposed under the Forest Health Plan include pruning, cutting, or removal of trees or other forest vegetation by hand or using hand-held equipment. Other hand-labor treatments would involve removing dead wood, piling material, lopping and scattering, and spreading chips/mulch. Where mechanized treatment is not feasible, handwork would be used to connect mechanically treated polygons in the highest priority areas.
- **Prescribed Burning Treatments:** Both pile and broadcast burning are proposed, as is use of an air curtain burner. It is anticipated that approximately 400 acres would be treated using pile or broadcast burning. A burn plan would be prepared for each controlled prescribed burn for broadcast burns. Pile burns would be located at or adjacent to treatment areas; they are not subject to a burn plan. Both types of prescribed burning would rarely be employed as a standalone fuel or wood waste reduction measure, but rather compliment other management recommendations.
- **Herbicide Treatments:** Limited use of herbicide treatments is proposed. The following best management practices (BMPs) would be implemented, where feasible, when applying herbicide.
  - Use of chemical herbicides or pesticides should be conducted in accordance with the County's IPM Policy.

- Park staff should consult with a state-licensed Pest Control Advisor (PCA) to identify the appropriate site-specific herbicide application approach to meet vegetation management standards.
- Consider the timing of herbicide applications to minimize impacts to adjacent retained vegetation and nearby resources, and for maximum effectiveness (typically between June 15 and November 15, with a potential extension through December 31 or until local rainfall greater than 0.5 inch is forecasted within a 24-hour period from planned application).
- Only herbicides and surfactants that have been approved for aquatic use by the U.S. Environmental Protection Agency (EPA) and are registered for use by the California Department of Pesticide Regulation (CDPR) should be used for aquatic vegetation control work.
- Herbicide application should be consistent with Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) label instructions and use conditions issued by the EPA and CDPR.
- The lowest recommended rate to achieve vegetation management objectives of both herbicides and surfactants should be utilized to achieve desired control.
- An indicator dye should be added to the tank mix to help the applicator identify areas that have been treated and better monitor the overall application.
- No application to plants whose base is submerged in stream channels.
- Follow safe procedures for transporting, mixing, loading, and proper disposal of herbicides.
- Minimize the use of foliar (spray) applications, prioritizing localized or direct applications.

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# 3 The California Vegetation Treatment Program Environmental Checklist

## Project Information

1. **Project Title:** Sanborn and Upper Stevens Creek County Parks  
Forest Health Plan  
Board of Forestry Project ID: 2022-17

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2. **Project Proponent Name and Address:** Santa Clara County  
298 Garden Hill Drive  
Los Gatos, California 95032

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3. **Contact Person Information and Phone Number:** Shelan Zuhdi, 669.288.2774

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4. **Project Location:** Santa Clara County, Sanborn and Upper Stevens Creek County Parks

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5. **Total Area to be Treated (acres)** 1,367

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6. **Description of Project:** (Describe the whole action involved, including any phasing of initial treatments as well as planned treatments, including equipment to be used and planned duration of treatments, but not limited to later phases (e.g., maintenance) of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)  
See Section 2, Project Description.
7. **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
8. **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, 400 Acres
  - Prescribed (Pile) Burning, 400 acres
  - Mechanical Treatment, 1,367 acres
  - Manual Treatment, 1,1362 acres
  - Prescribed Herbivory, acres
  - Herbicide Application, 25 acres
9. **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

10. **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

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

The project site is within Sanborn and Upper Stevens Creek County parks and within a network of open space. The City of San Jose is 14 miles west of the parks. Sanborn Park is between Skyline Boulevard (State Route 35) to the west and the City of Saratoga to the east. Upper Stevens Creek is approximately 7 miles northwest of Sanborn County Park. Both parks are within a network of adjacent open spaces and preserves. Upper Stevens Creek Park is bordered by Monte Bello Open Space Preserve to the north, Saratoga Gap Open Space Preserve to the south and Long Ridge Open Space preserve to the west.

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

No other public agency approvals are required for this project. The California Department of Fish and Wildlife and California Department of Conservation were consulted for input on the treatment design after a field visit. Bay Area Air Quality Management District (BAAQMD) will be consulted, and a smoke management plan will be prepared prior to burning operations.

The Santa Clara County Code of Ordinances Division C16 was enacted to preserve the County's trees on private and public property. The ordinance regulates tree removal, identifies protected trees, specifies the permit process required for removal of protected trees, and describes restrictions on commercial and heritage tree removal. Any tree removal or pruning for the maintenance, operation, or development of County Parks property under established policies or procedures approved by the Director of the Parks and Recreation Department are exempt from the review and permitting requirements of Ordinance Code Division C.16.

#### **Coastal Act Compliance**

- The proposed project is NOT within the Coastal Zone  
 The proposed project is within the Coastal Zone (*check one of the following boxes*)  
 A coastal development permit been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable  
 The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required

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

Pursuant to SPR CUL-2, Santa Clara County Parks Department contacted culturally affiliated tribes via email on August 18th and 19th, 2022, and via certified mail on August 19th and August 23rd,

2022 (Table 2). No responses have been received to date. The project is within the scope of the PEIR and does not require additional CEQA review and documentation.

**Table 2. Santa Clara County Parks Tribal Outreach Correspondence Log**

Date	Contact Type	From	To	Communications
6/28/2022	Email	Dudek	Native American Heritage Commission (NAHC)	Request Sacred Lands file (SLF) search and list of Native American contacts in the Project Area
6/28/2022	Email	NAHC	Dudek	Responded that results will take 6-8 weeks.
7/26/22	Email	NAHC	Dudek	Negative response for the SLF search and provided contacts for tribal representatives.
8/18-19/22	Email	Santa Clara County Parks	Tribal representatives from NAHC list	Letter describing the project.
8/19/22; 8/23/22	USPS	Santa Clara County Parks	Tribal representatives from NAHC list	Letter describing the project.

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

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

The proposed project would be implemented over a 10-year timeframe. Prior to implementing treatments or retreating any area within the project boundary, the project proponent will verify that site conditions described in the PSA are still relevant.

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

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

- There is NO new information which would render mitigation measures previously considered infeasible or not considered in the CalVTP PEIR now feasible OR such mitigation measures have been adopted. [Guidelines Sec.15162(a)(3); PRC Sec. 21166(c)]
- All applicable SPRs and Mitigation Measures are NOT feasible or will NOT be implemented (*provide explanation*)

Explanation:

**DETERMINATION (To be completed by the project proponent)**

On the basis of this initial evaluation:

- I find that all of the effects of the proposed project (a) have been analyzed adequately in the CalVTP PEIR, (b) have been avoided or mitigated pursuant to the CalVTP PEIR, and (c) all applicable mitigation measures and Standard Project Requirements identified in the CalVTP PEIR will be implemented. The proposed project is therefore **WITHIN THE SCOPE** of the CalVTP PEIR. NO ADDITIONAL CEQA DOCUMENTATION is required.
- I find that the proposed project will have effects that were not examined in the CalVTP PEIR. These effects are less than significant without any mitigation beyond what is already required pursuant to the CalVTP PEIR. A NEGATIVE DECLARATION will be prepared.
- I find that the proposed project will have effects that were not examined in the CalVTP PEIR. Although these effects might be significant in the absence of additional mitigation beyond what is already required pursuant to the CalVTP PEIR, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent that would avoid or reduce the effects so that clearly no significant effects would occur. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project will have environmental effects that were not examined in the CalVTP PEIR. Because these effects are or may be significant and cannot be clearly mitigated, an ENVIRONMENTAL IMPACT REPORT will be prepared.

Signature: \_\_\_\_\_ Date \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title \_\_\_\_\_

Santa Clara County Parks  
Agency

## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the life span of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:

(Definitions located in Chapter 3 – “Environmental Settings, Impacts, and Mitigation Measures, 3.1.4 – Terminology Used In the PEIR”)

- **Less Than Significant (LTS)** - An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
- **Less Than Significant with Mitigation (LTSM)** - An impact was identified within the PEIR which was viewed in totality as potentially significant and/or significantly unavoidable and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.
- **Potentially 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 evaluated to be the same or equal to the impact in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.

4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.
5. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.
6. Standard Project Requirements (SPR) and Mitigations Measures (MM).
  - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
  - **Implementing Entity.** Most cases this will be CAL FIRE. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archaeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
  - **Verifying/Monitoring Entity.** Most cases this will be CAL FIRE. The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.
  - **NOTE:** the cited SPRs and MMs are summarized to manage the template size. Refer to Attachment A for the approved CalVTP requirements.



### 3.1 Aesthetics and Visual Resources

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AES-1:</b> 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, pp. 3.2-16-3.2-19	SPR AES-2 SPR AES-3 SPR AQ-2 SPR AQ-3	LTS	Yes	SPR AES-2 SPR AES-3 SPR AQ-2 SPR AQ-3	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** The proposed project would include shaded fuel break installations, WUI fuel reduction (defensible space), and ecological restoration project types using manual treatments, a combination of mechanical and manual treatments, and prescribed pile burns. The potential for the treatment activities to result in short-term degradation of visual character was examined in the CalVTP PEIR. Equipment and vehicles associated with manual and mechanical treatments and prescribed burning could be visible to public viewers at scenic vistas, along a state scenic highway, or at other public viewing locations. Both the Sanborn and Upper Stevens Creek County Park are Santa Clara County recreational resources that are publicly accessible. Additionally, both parks are bordered by open space and other parks, which provide recreational opportunities. Upper Stevens Creek shares a boundary with the Monte Bello Open Space Preserve to the northeast; Long Ridge Open Space Preserve to the west, across Highway 35; and Saratoga Gap Open Space Preserve. Sanborn County Park also shares a boundary with the Saratoga Gap Open Space Preserve to the north, and Castle Rock to the west across Highway 35. Some treatments would occur adjacent to recreation resources, such as the defensible space and the shaded fuel treatments adjacent to the Sanborn walk-in campsites, and would be visible to the public.

As identified in the PEIR, these public lands represent high visual character and quality because of the limited development and often pristine nature of the landscape. The Santa Clara County General Plan contains policies that protect scenic resources and specifically mention the preservation of views of hillsides and ridgelines (Santa Clara County 1994). Treatment areas within the project site are located on hillsides and ridgelines; however, these policies are focused on limiting long term impacts related to development within hillsides and ridgelines, and there are no restrictions related to vegetation treatment within scenic corridors. In addition to the General Plan, both Upper Stevens Creek County Park and Sanborn County Park have Park Plans. The Upper Stevens Creek Park Management Plan identifies enhancing views within the park, specifically from Table Mountain through the use of vegetation management (Santa Clara County Parks 1993). The Sanborn County Park Master Plan does not contain any goals or policies governing

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

scenic resources (Santa Clara County Parks 2019). The project would implement a shaded fuel break along Charcoal Road and Table Mountain and therefore would assist in the goal set forth by the Upper Stevens Creek Management Plan.

Upper Stevens Creek County Park and Sanborn County Park are located along Highway 35. A portion of Upper Stevens Creek County Park is located along a segment of Highway 35 that is designated as a scenic highway (Caltrans 2018). Additionally, the remainder of the Highway 35 segments that border both parks are considered eligible scenic highways and local scenic roadways (Santa Clara County 1994). The Santa Clara County General Plan contains policies that are designed to protect scenic highway corridors within Santa Clara County. Policies that would be applicable to the project include policies that protect highways from activities that would diminish the aesthetic beauty along the scenic highway, regulate signs along the scenic highway, and screen equipment from view along the scenic highway.

While treatment areas are visible to the public, many of the views of treatment areas are limited due to intervening hilly terrain and would be brief. The proposed treatment activities would not block views, dominate a viewshed, degrade visual character or quality of public views, or significantly disrupt views from a scenic vista or state scenic highway. Although equipment and vehicles may be visible from state scenic Highway 35 and public views within the park, treatment activities within each treatment area would be temporary. With implementation of SPR AES-2 and SPR AES-3, SCC Parks would, avoid staging equipment within viewsheds as well as retain sufficient vegetative screening. Proposed treatments would not involve complete removal of vegetation. Rather, fuel break treatments would increase the horizontal spacing between retained vegetation, increase the vertical separation between surface fuels and overstory tree canopies, and modify surface fuels (grasses, shrubs, debris) to reduce fire intensity and flame lengths. Ecological treatments would consist of selective thinning, removal of dead and dying trees, and control of invasive species (where present), to promote the reestablishment of native tree species.

In addition, smoke from prescribed burns would not result in substantial short-term aesthetic impacts, because burning would be temporary, lasting up to 1 week but typically only 1 day. SCC Parks would prepare and adhere to a smoke management plan (SPR AQ-2) and a burn plan (SPR AQ-3), which outline the conditions under which prescribed burning can occur to reduce the generation and visibility of smoke.

Therefore, with implementation of SPRs AES-2, AES-3, AQ-2, and AQ-3, the project would result in a less than significant impact to visual resources and would be consistent with the PEIR and would not constitute a substantially more severe significant impact than was analyzed in the PEIR.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AES-2:</b> 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, pp. 3.2-20-3.2-25	SPR AES-1 SPR AES-3 SPR AD-4 SPR REC-1	LTS	Yes	SPR AES-1 SPR AES-3 SPR AD-4 SPR REC-1	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** The proposed project would include WUI fuel reduction, ecological restoration, and shaded fuel break installations. The potential for the treatment activities to result in long-term visual impacts was examined in the CalVTP PEIR. As discussed above, it is located within Sanborn and Upper Stevens Creek County Parks and public views of the project are likely as the activities would occur within the parks which contain recreational amenities. Additionally, as described above, there is a designated scenic highway and local scenic roadway, Skyline Boulevard (Highway 35), that borders the western boundary of the County parks.

Vegetation treatment is planned along Skyline Boulevard (Highway 35). However, due to intervening terrain and fast travel speeds, views of the project site are intermittent. Further, project vegetation treatment would consist of shaded fuel breaks, which would be implemented such that the project would result in a mosaic plant pattern where up to 50% of existing vegetation would be retained. Fuel reduction activities would reduce vegetation throughout the project site, including along Skyline Boulevard (Highway 35), within Sanborn and Upper Stevens Creek County Parks. Although views of the project would be visible to the public, due to distance, intervening terrain, and the amount of vegetation that would be retained within and surrounding the project area, the project would not significantly result in a degradation of scenic vistas, visual character, public views, or any scenic resources visible from a state scenic highway. Additionally, SPR AES-1 and SPR AES-3 would be incorporated into vegetation treatments to break up or screen linear edges of treatment areas and screen views from public viewpoints as feasible. SPR AD-4 and SPR REC-1 would be incorporated prior to prescribed pile burning, which would ensure notification to the public prior to the commencement of burning operations. Further, because no broadcast burning is proposed, only pile burning, the project would not result in significant scarring or discoloration of large areas of the landscape. And as discussed above in Impact AES-1, visual impacts associated with smoke dispersion would be temporary.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

The proposed treatment project would not result in a long-term or substantial degradation of a scenic vista, substantially damage resources in a State Scenic Highway, or degrade the existing visual character and quality of the project site. Therefore, with implementation of SPRs AES-1, AES-3, AD-3, and REC-1, the project would result in a less than significant impact to visual resources that is consistent with the PEIR and would not constitute a substantially more severe significant impact than was analyzed in the PEIR.

<b>Impact AES-3:</b> 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, pp 3.2-25-3.2-27	MM AES-3	SU	No	N/A	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project does not propose to implement the Non-Shaded Fuel Break Treatment Type; this impact does not apply.

<b>Other Impacts to Aesthetics:</b> Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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The project site is located along a designated scenic highway (Highway 35) and is located in two county parks which include recreational areas. Site-specific characteristics of the proposed treatment project are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR Section 3.2. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. Additionally, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to aesthetics and visual resources would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR AES-1 Vegetation Thinning and Edge Feathering:</b> This SPR only applies to mechanical and manual treatment activities within all treatment types.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR AES-2 Avoid Staging within Viewsheds:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR AES-3 Provide Vegetation Screening:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate of Feather and Screen Publicly Visible Non-Shaded Fuel Breaks.</b> 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.	No	<u>N/A</u>	<u>N/A</u>

## 3.2 Agriculture and Forestry Resources

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AG-1:</b> 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, pp 3.3-7-3.3-8	N/A	LTS	Yes	N/A	LTS	No <input checked="" type="checkbox"/>
<p>The proposed project would include shaded fuel break installations, defensible space implementation, and wildfire resiliency projects using manual treatments, a combination of mechanical and manual treatments, and prescribed pile burns. The project site land use designation is Regional Park (Santa Clara County 2016) and has a zoning designation of Hillside (HS) per the Santa Clara County Zoning Map (Santa Clara County n.d.). The project is not currently designated or zoned as forest land. However, the project does include forest and woodland type vegetation (Oak Woodland, Redwood, and Douglas-fir/Tanoak). The shaded fuel breaks would be implemented using mechanical and manual treatments and would remove dead trees, ladder fuels on mature trees, surface dead woody material to thin the existing vegetation within the treatment areas. Proposed vegetation treatments would vary across the project site. Generally, up to 50% of vegetation would be retained. Any tree removal would comply with the Santa Clara County Tree Preservation and Removal Ordinance Division C16 (Santa Clara County 2022a). Additionally, the existing uses within the project sites would remain the same after project implementation. Therefore, the project would not result in the direct loss of forest land or conversion of forest land to non-forest use. As a result, the project would have a less than significant impact on agriculture and forest resources.</p>							
<b>Other Impacts to Agriculture and Forest Resources:</b> Would the project result in other impacts to agriculture and forest resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
<p>Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR Section 3.3. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. Additionally, the</p>							

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact

inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to agriculture and forest resources would occur.

### 3.3 Air Quality

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AQ-1:</b> Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	Table 3.4-1; Impact AQ-1, pp. 3.4-26–3.4-32; Appendix AQ-1	SPR AQ-1 through SPR AQ-6 MM AQ-1	PSU	Yes	SPR AQ-1 through SPR AQ-4 SPR AQ-6 MM AQ-1	PSU	<input checked="" type="checkbox"/>

The project would require the use of vehicles, mechanical equipment, and hand tools. These actions would result in the emission of criteria pollutants that could exceed the California Ambient Air Quality Standards, the National Ambient Air Quality Standards, Bay Area Air Quality Management District Rules and/or the Santa Clara County air quality rules and regulations (BAAQMD 2021). Mechanical treatment would require the use of heavy-duty off-road equipment such as a masticator and manual treatments would use chainsaws and other handheld equipment. A chipper may also be used to assist with biomass disposition; in cases when chips would be spread on site, chips would not exceed an average of 6 inches in depth. The project would also include pile burning which would generate criteria pollutants. The potential for the emission of criteria pollutants from the described



	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

activities was examined in the PEIR. SPRs AQ-1 through AQ-4, and AQ-6 would be implemented by the project proponent to reduce the level of criteria pollutants generated by treatment activities. SPR AQ-5 would not apply to the project because the project site does not contain any naturally occurring asbestos (Agency for Toxic Substances and Disease Registry 2007; USGS 2011). The components of MM AQ-1 that have been determined by SCC Parks to be feasible would be implemented to reduce emissions, including using gasoline-powered equipment, encouraging carpooling to the project site, and using the Best Available Control Technology for emission reduction of oxides of nitrogen and particulate matter on equipment. To the extent feasible, equipment meeting Tier 4 emission standards and using renewable energy would be used. Though implementation of the applicable SPRs and the feasible MMs would lower the level of impact to criteria air pollutants, as described in the PEIR, this impact would remain significant and unavoidable.

<b>Impact AQ-2:</b> Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	Yes	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	<input checked="" type="checkbox"/>
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The project would require the use of vehicles and mechanical equipment during treatments, as described above, which could expose people to diesel particulate emissions. However, the treatments would take place over a short duration of time and would not occur all at once, limiting the level of exposure to diesel particulate matter. Further, the treatment activities would progress across the treatment sites, meaning that diesel particulate matter generated by treatment activities would not take place near any single sensitive receptor for an extended period. SPR HAZ-1 would be implemented, requiring that all diesel and gasoline-powered equipment be properly maintained in compliance with state and federal requirements, to prevent excessive emissions of diesel particulate matter. Further, SPRs NOI-4 and NOI-5 would be implemented by the project proponent, requiring staging areas to be as far as possible from human receptors and restricting the amount of time equipment can idle. Therefore, the impact to diesel particulate matter would be less than significant.

<b>Impact AQ-3:</b> Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	SPR AQ-4 SPR AQ-5	LTS	No	N/A	No Impact	<input checked="" type="checkbox"/>
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The proposed treatment activities would involve ground-disturbance activities. The project would require the use of off-road equipment for mechanical treatment activities and road maintenance activities. Ground-disturbance activities can expose receptors to fugitive dust emissions contain naturally occurring asbestos. The treatment areas are not located on soil types that contain naturally occurring asbestos (Agency for Toxic Substances and Disease Registry 2007; USGS 2011) and this impact does not apply.



	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AQ-4:</b> Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	Impact AQ-4, 3.4	SPR AD-4 SPR AQ-2 SPR AQ-6	PSU	Yes	SPR AD- 4 SPR AQ-2 SPR AQ-6	PSU	<input checked="" type="checkbox"/>

The project would include a combination of prescribed burning treatments on up to 400 acres of the project area. The project proposes prescribed pile burning as well as use of an air curtain burner to dispose of vegetation cleared by manual vegetation treatments. Use of an air curtain burner would assist in reducing air pollution. The project would also utilize broadcast burning.. Prescribed burning could expose people to toxic air contaminants. Exposure to toxic air contaminants from prescribed burns would be short term and last from 1 day to 1 week. Firefighters and the general public may be exposed to smoke during prescribed burning, which could potentially impact the surrounding communities of the City of Los Gatos, 5 miles southeast of the treatment areas in Sanborn Park; the City of Monte Sereno, 4 miles east of the treatment areas in Sanborn Park; the City of Saratoga, 4 miles south of the treatment areas in Upper Stevens Creek Park, and/or the City of Blue Hills, 3 miles northeast of the treatment areas in Upper Stevens Creek Park depending on wind conditions. However, because the smoke would be dispersed over a distance, the public would experience lower levels of toxic air contaminants and the location of adjacent communities would be taken into consideration when planning the prescribed burning. Prescribed burning would take place on a date when conditions are most favorable. Prior to broadcast burning, a burn plan would be created per SPR AD-4. The prescribed burning would be required to adhere to the burn plan; should conditions deviate from the burn plan, the burn will be rescheduled. Crews would remain on site to monitor prescribed burning activities. Further, the project proponent would implement SPRs AQ-2 and AQ-6, requiring the creation of a smoke management plan, and would follow all CAL FIRE safety procedures to limit the exposure to toxic air contaminants from burning. Though the SPRs would be implemented to prevent and minimize smoke emissions and exposure to toxic air contaminants from smoke, this impact would remain significant and unavoidable as determined in the PEIR.

<b>Impact AQ-5:</b> Expose People to Objectionable Odors from Diesel Exhaust	Impact AQ-5, 3.4	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	Yes	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	<input checked="" type="checkbox"/>
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The treatments would require the use of vehicles and mechanical equipment, as described above, that could expose people to objectionable odors from diesel exhaust. However, the levels of diesel exhaust would not be at excessive levels, nor they would affect a substantial number of people. The exposure to objectionable odors would be short term and dispersed across the project site. As described in Impact AQ-2, the emissions would be temporary and would not be generated in one location for an extended period; further, the emissions would dissipate rapidly from the source as distance increased. All diesel- and gasoline-powered equipment would be properly maintained in compliance with state and federal emission requirements, which would lower the level of emissions from diesel exhaust, per SPR HAZ-1. The project proponent would also implement SPRs NOI-4

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

and NOI-5. These SPRs would reduce the level of exposure to diesel exhaust by requiring staging areas to be as far from receptors as possible and restricting idling time. Therefore, this impact would be less than significant.

<b>Impact AQ-6:</b> Expose People to Objectionable Odors from Smoke During Prescribed Burning	Impact AQ-6, 3.4	SPR AD-4 SPR AQ-2 SPR AQ-3 SPR AQ-6	PSU	Yes	SPR AD-4 SPR AQ-2 SPR AQ-3 SPR AQ-6	PSU	<input checked="" type="checkbox"/>
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The project includes prescribed burning of vegetation removed by manual treatments as well as broadcast burning. Prescribed burning could expose people to objectionable odors from the smoke. This would be temporary and would depend on the intensity of the produced smoke, wind speed, wind direction, and the proximity and sensitivity of exposed individuals. Prescribed burning would require Santa Clara County Fire Department (SCCFD) personnel. The project would occur on County property in recreational county parks. However, odors from the prescribed burning could potentially impact the surrounding communities, as discussed in Impact AQ-4, depending on wind conditions. This exposure would occur infrequently as prescribed burns would occur when conditions are favorable and for a short duration, lasting between 1 day and 1 week. As described in Impact AQ-4, the project proponent would implement actions to reduce the exposure of receptors to smoke and associated odors. SPRs AD-4, AQ-2, AQ-3, and AQ-6 would be implemented to prevent and minimize smoke orders. However, there is no guarantee that smoke from every prescribed burn would behave as predicted and this impact would remain significant and unavoidable as determined in the PEIR.

<b>Other Impacts to Air Quality:</b> Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR Section 3.4. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to air quality are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. Additionally, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to air quality would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR AQ-1 Comply with Air Quality Regulations:</b> This SPR applies to all treatment activities and all treatment types.	Yes	SCC Parks Prior-During	SCC Parks
<b>SPR AQ-2 Submit Smoke Management Plan:</b> This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	SCC Parks Prior	SCC Parks
<b>SPR AQ-3 Create Burn Plan:</b> 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.	Yes	SCC Parks Prior	SCC Parks
<b>SPR AQ-4 Minimize Dust:</b> This SPR applies to all treatment activities and treatment types.	Yes	SCC Parks During	SCC Parks
<b>SPR AQ-6: Prescribed Burn Safety Procedures:</b> Prescribed burns will follow all safety procedures required of CAL FIRE crews, including the implementation of an approved Incident Action Plan (IAP).	Yes	SCC Parks During	SCC Parks
<b>SPR AQ-5: Avoid Naturally Occurring Asbestos:</b> The project proponent will avoid ground disturbing 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 air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	No	N/A	N/A
<b>MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</b> Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.	Yes	SCC Parks During	SCC Parks

### 3.4 Archaeological, Historical, and Tribal Cultural Resources

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact CUL-1:</b> Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, pp. 3.5-14-3.5-15	SPR AD-2 SPR CUL-1 SPR CUL 3 SPR CUL 4 SPR CUL-7 SPR CUL-8	LTS	Yes	SPR AD-2 SPR CUL-1 SPR CUL 3 SPR CUL 4 SPR CUL-7 SPR CUL-8	LTS	<input checked="" type="checkbox"/>

SPR AD-2 stipulates that prior to Project activities, a qualified person will clearly define any protected resources (including cultural resources) both on maps and on-site through the use of highly visible flagging or clear landscape demarcations. This action will serve to identify areas of avoidance or specific treatment.

Built Historical Resources were identified as a result of the archaeological and historical resource record search (SPR CUL-1) conducted on June 15, 2022, by the Northwest Information Center, Rohnert Park, CA. At least one of these resources is on the National Register of Historic Places (NRHP). Additional built historical resources were identified during the pre-field research (SPR CUL-3) and intensive pedestrian survey (SPR CUL 4) conducted on intermittent days from August 1-15, 2022. Very few of these resources have been evaluated for significance.

SPR CUL-7 (Avoid Built Historical Resources) stipulates that no prescribed burning or mechanical treatment will occur within 100 feet of built historical resources, and work within 100 feet of built historical resources will be conducted after consultation with and written approval from a qualified archaeologist. Therefore, for “defensible space” activities that occur within 100 feet of built historical resources, manual treatment with hand tools is permitted. Additionally, SPR CUL-8 (Cultural Resource Training) will provide training to crew members and contractors on how to prevent disturbance to any cultural resources.

Following these SPRs, impacts to Built Historic Resources would be less than significant.

<b>Impact CUL-2:</b> Cause a Substantial Adverse Change in the Significance of	Impact CUL-2, pp. 3.5-15-3.15-16	SPR AD-2 SPR CUL-1 through	SU	Yes	SPR AD-2 SPR CUL-1 through	LTSM	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Unique Archaeological Resources or Subsurface Historical Resources		SPR CUL-5 SPR CUL-8 MM CUL-2			SPR CUL-5 SPR CUL 8 MM CUL-2		

SPR AD-2 stipulates that prior to Project activities, a qualified person will clearly define any protected resources (including cultural resources) both on maps and on-site through the use of highly visible flagging or clear landscape demarcations. This action will serve to clearly identify areas of avoidance or specific treatment.

No unique archaeological resources were identified within the Project area as a result of the record search (SPR CUL-1) conducted on June 15, 2022, at the Northwest Information Center, Rohnert Park, California; however very little (less than 10%) of the Project area had been previously surveyed. The records search identified both prehistoric and historic archaeological resources within the 0.25-mile study buffer. Native American tribes culturally and geographically affiliated with the region were contacted via email and certified mail (SPR CUL-2). No responses have been received to date. (Tribal Cultural Resources are further discussed in Impact CUL-3.) A sensitivity study was conducted that identified areas with the potential to contain archaeological resources (SPR CUL-3). The criteria for sensitivity included: areas with less than 30% slope that are within 300 meters of a water source, or on soils with potential to harbor buried A-horizons, and/or within 100 meters of a known archaeological site. Additionally, historic maps and topographic maps were reviewed. A pedestrian survey (SPR CUL-4) was conducted on areas deemed “sensitive” by the sensitivity study within the Project Area. The intensive-level (15 meter transects or less) survey occurred on intermittent days from August 1-15, 2022 and identified both prehistoric and historic archaeological resources. The survey report is included as Attachment C. While the proposed treatment primarily involves activities that either require no soil disturbance or very shallow soil disturbance, SPR CUL-5 (Treatment of Cultural Resources) stipulates that, if cultural resources are found within the treatment area and cannot be avoided, a qualified archaeologist (and potentially a tribal representative, depending on the results of the tribal outreach), will assess whether the resource qualifies as a unique archaeological, historical or tribal cultural resource, and develop effective protection measures for the resource, that may include adjusting the treatment area to avoid the resource, or changing the treatment activities. Manual treatment of vegetation (no mechanized treatment) can occur within the boundaries of unavoidable archaeological sites with the presence of a qualified archaeological monitor.

There is always a potential for unknown unique archaeological resources or subsurface historical resources to be inadvertently damaged during treatment activities. This would be a potentially significant impact if unknown cultural resources are inadvertently encountered during ground disturbing activities. However, SPR CUL-8 (Cultural Resource Training), and MM-CUL-2 (Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources) would be implemented to protect an inadvertent discovery of archaeological or historical resources.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

Following these SPRs and MMs, impacts to Unique Archaeological Resources or Subsurface Historical Resources would be less than significant with mitigation.

<b>Impact CUL-3:</b> Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, p. 3.5-17	SPR CUL-1 through SPR CUL-6 SPR CUL-8	LTS	Yes	SPR CUL-1 through SPR CUL-6 SPR CUL-8 MM CUL-2	LTSM	<input checked="" type="checkbox"/>
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A request was sent to the Native American Heritage Commission (NAHC) on June 28, 2022, to check their Sacred Lands File for the Project. The NAHC responded on July 26, 2022, with negative results for the SLF and provided a list of tribal representatives. Santa Clara County State Parks sent letters via email and certified mail to Native American representatives associated with the geographical area of the Project on August 18-23, 2022. No tribes have responded to date.

No tribal cultural resources have been identified as a result of contacting geographically affiliated Native American tribes listed on the most current Native American Heritage Commission (NAHC) provided Native Americans Contact List. The NAHC Sacred Land Files search results were negative. Additionally, no tribal cultural resources have been identified as a result of the archaeological records search (SPR CUL-1) conducted by the Northwest Information Center, background research (SPR CUL-3), or the intensive pedestrian survey (SPR CUL-4). However, the possibility of inadvertent discoveries always exists so with the implementation of SPR CUL-6 (Treatment of Tribal Cultural Resources), SPR CUL-8 (Cultural Resource Training) and MM CUL-2 (Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources), impacts to Tribal Cultural Resources would be less than significant.

<b>Impact CUL-4:</b> Disturb Human Remains	Impact CUL-4, pp. 3.5-18	CUL-1 CUL-3 CUL-4	LTS	Yes	SPR CUL-8 MM CUL-2	LTS	<input checked="" type="checkbox"/>
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No cemeteries, burial sites, or archaeological resources were identified as a result of the records search conducted by the Northwest Information Center (CUL-1), background research (CUL-3), or the intensive pedestrian survey (CUL-4). Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code, Section 5097, as well as the application of CUL-8 (Cultural Resources Training) and MM CUL-2 (Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources) impacts to Human Remains would be less than significant.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Other Impacts to Archeological, Historical, and Tribal Cultural Resources:</b> Would the project result in other impacts to archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>

Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in Section 3.5.1 and Section 3.5.2 of the CalVTP PEIR. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to archaeological, historical, and tribal cultural resources are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to archeological, historical, and tribal cultural resources would occur.



	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR CUL-1 Conduct Record Search:</b> 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	<u>SCC Parks</u> Prior	<u>SCC Parks</u>
<b>SPR CUL-2 Contact Geographically Affiliated Native American Tribes:</b> 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	<u>SCC Parks</u> Prior	<u>SCC Parks</u>
<b>SPR-CUL-3 Pre-field Research:</b> 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	<u>SCC Parks</u> Prior	<u>SCC Parks</u>
<b>SPR CUL-4 Archaeological Surveys:</b> 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	<u>SCC Parks</u> Prior	<u>SCC Parks</u>
<b>SPR CUL-5 Treatment of Archaeological Resources:</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR CUL-6 Treatment of Tribal Cultural Resources:</b> 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	<u>SCC Parks</u> During	<u>N/A</u>
<b>SPR CUL-7 Avoid Built Historical Resources:</b> 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 archeologist. If the	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>



	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
records search does not identify known historical resources in the treatment area, but structures (i.e., building, 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.			
<b>SPR CUL-8 Cultural Resource Training:</b> 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	<u>SCC Parks</u> Prior-During	<u>SCC Parks</u>
<b>MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>

### 3.5 Biological Resources

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact BIO-1:</b> Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	Impact BIO-1, pp. 3.6-132-3.6-139	<u>SPR BIO-</u> 1, 2, 7, 9 <u>SPR AQ-</u> 3, 4 <u>SPR GEO-</u> 1, 3, 4, 5, 7 <u>SPR HYD-</u> 5 <u>MM BIO-</u> 1a, 1b, 1c	LTSM	Yes	<u>SPR BIO-</u> 1, 2, 6, 7, 9 <u>SPR AQ-</u> 3, 4 <u>SPR GEO-</u> 1, 3, 4, 5, 7 <u>SPR HAZ-</u> 1 <u>MM BIO-</u> 1a, 1b	LTSM	<input checked="" type="checkbox"/>

Treatment activities could result in direct or indirect impacts to two potentially occurring plant species listed under the California Endangered Species Act (CESA) or the federal Endangered Species Act (FESA) and to 13 additional, non-listed special-status plants with potential to occur within the Project site (Table 3). Data review and reconnaissance surveys for all treatment areas were conducted in accordance with SPR BIO-1 (see Attachment D, Biological Technical Memorandum for the Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project). A variety of soils and natural communities occur throughout the Project site that may support special-status plants. Due to the dense woodland and coniferous forest vegetation types present throughout the Project site, one species listed as endangered under both FESA and CESA, San Mateo woolly sunflower (*Eriophyllum latilobum*), and one species listed as rare under CESA, Dudley’s lousewort (*Pedicularis dudleyi*), have some potential to occur within all of the treatment areas.

King’s Mountain manzanita (*Arctostaphylos regismontana*), a non-listed special-status species, has been historically documented within Treatment Areas 01A, 01B, 04A, 04B (CDFW 2022a). Woodland woollythreads (*Monolopia gracilens*), another non-listed special-status species, has been historically documented within Treatment Area 11 (CDFW 2022a). In addition, the following 11 non-listed special-status plant species may occur throughout all of the project treatment areas: Anderson’s manzanita (*Arctostaphylos andersonii*), arcuate bush-mallow (*Malacothamnus arcuatus*), bent-flowered fiddleneck (*Amsinckia lunaris*), chaparral ragwort (*Senecio aphanactis*), Loma Prieta hoita (*Hoita strobilina*), minute pocket moss (*Fissidens pauperculus*), most beautiful jewelflower

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

(*Streptanthus albidus* ssp. *peramoenus*), Sanford’s arrowhead (*Sagittaria sanfordii*), Santa Cruz clover (*Trifolium buckwestiorum*), western leatherwood (*Dirca occidentalis*), and white-flowered rein orchid (*Piperia candida*). Additional details are included in Attachment D.

Potential impacts to special-status plant species include direct removal or destruction during hand, mechanical, or prescribed burn treatments or from being crushed by vehicles or trampled by workers; reduction of the potential for seed set, for example from plant debris left in place over areas occupied by special-status plants; alteration of growth and production through habitat modification or soil erosion; and indirect impacts from dust, soil compaction, contamination from fuel or other chemicals, spread of invasive plants, and introduction of plant pathogens. The loss of individual special-status plants would be a significant impact because it would contribute to ongoing population declines of these already rare species.

SPR BIO-7, which requires protocol-level surveys for special-status plants, would apply to all treatment activities. Surveys for special-status plants in accordance with SPR BIO-7 would be sufficient to identify any occurrences of the two listed plant species, Dudley’s lousewort and San Mateo woolly sunflower, if present within the Project site, so that avoidance measures in SPR BIO-7 and MM BIO-1a could be implemented. Surveys conducted under SPR BIO-7 would also be sufficient to identify the additional 13 non-listed special-status plant species potentially occurring within the Project site, and avoidance measures in MM BIO-1b would assure avoidance of areas occupied by these plants. Protocol-level surveys for special-status plants will not be required if the target special-status plant species is a herbaceous annual, stump-sprouting species, or geophyte species, and if the treatment may be carried out during the dormant season for that species or when the species has completed its annual life cycle, provided the treatment (i.e., hand treatment methods) will not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment or destroy seeds, stumps, or roots, rhizomes, bulbs, and other underground parts of special-status plants. Species that could potentially be avoided in this manner are bent-flowered fiddleneck, Anderson’s manzanita, Kings Mountain manzanita, woodland woollythreads, chaparral ragwort, most beautiful jewelflower, and Santa Cruz clover. SPR BIO-2, which requires worker training in sensitive biological resources, would further reduce the potential for impacts to special-status plants.

Identification of the location of rare plants in accordance with SPR BIO-1 and SPR BIO-7, and avoidance under MM BIO-1a and MM BIO-1b, would reduce or eliminate potential impacts to rare plants from habitat alteration. Several measures would reduce the potential for erosion to result in impacts to rare plants: SPR GEO-1, which would suspend treatment during heavy precipitation; SPR GEO-2, which limits use of high ground-pressure vehicles; SPR BIO-3, which would require stabilization of soil disturbed during treatment; SPR GEO-4, which would require monitoring for erosion; and SPR GEO-7, which prescribes measures to minimize erosion on steep slopes. SPR AQ-3 would require preparation of a burn plan for prescribed burns, in part to limit the potential for erosion.

Several additional project requirements would reduce potential indirect impacts to special-status plants. SPR BIO-6 would prevent the spread of plant pathogens in areas with sensitive biological resources, while SPR BIO-9 would prescribe measures to prevent the spread of invasive plants. SPR AQ-4

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

includes dust control measures such as speed limits and use of water trucks if road use creates excessive dust. Additionally, SPR HAZ-1 would require regular maintenance of equipment, which would reduce the potential fuel leaks and other spills from equipment. With implementation of the SPRs and the mitigation measure described above, impacts to special-status plants from the treatment project would be less than significant.

<b>Impact BIO-2:</b> Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, pp. 3.6-139-3.6-187	<u>SPR BIO-</u> 1, 2, 3, 4, 5, 8, 10, 11, 12 <u>SPR HYD-</u> 1, 3, 4, 5 <u>SPR HAZ-</u> 5, 6 SPR HYD-5 <u>MM BIO-</u> 2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4	PS/SU	Yes	<u>SPR BIO-</u> 1, 2, 3, 4, 5, 8, 10, 12 <u>SPR HYD-</u> 1, 3, 4, 5 <u>SPR HAZ-</u> 5, 6 <u>MM BIO-</u> 2a, 2b, 2e, 2g, 3a, 4	LTSM	<input checked="" type="checkbox"/>
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Treatment activities could result in direct and indirect impacts to special-status wildlife (Table 4). Data review and reconnaissance surveys were conducted in accordance with SPR BIO-1 (see Attachment D). The project proponent is in the process of consulting with regulatory agencies (California Department of Fish and Wildlife [CDFW] and U.S. Fish and Wildlife Service [USFWS]) and will implement all agency recommendations into project design.

**Special-Status Amphibians:** Five special-status amphibian species, including two listed species, occur in the vicinity of the Project site. California red-legged frog (*Rana draytonii*) is listed as threatened under FESA and a California Species of Special Concern (SSC) and is known to breed in creeks and streams in the project vicinity (CDFW 2022a). California red-legged frog has a moderate potential to occur within many of the Project treatment areas. Suitable breeding, foraging, and dispersal habitat for California red-legged frog is present within perennial and ephemeral drainages in many of the

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

Project treatment areas. California red-legged frog may disperse up to 1 mile from a known aquatic breeding site (USFWS 2005). Woodland habitat surrounding drainages with downed logs, woody debris, and areas of persistent summer moisture may serve as suitable upland refugia for California red-legged frog.

The Central Coast distinct population segment (DPS) of foothill yellow-legged frog (*Rana boylei*) is proposed to be listed as threatened under FESA, is listed as endangered under CESA, and has low potential to occur throughout the Project sites. This species has historically been documented within the vicinity of Saratoga and Steven’s Creeks; however, it is now believed that this species is extirpated from these areas (CDFW 2022a). Marginal rocky stream habitat within forest and woodland habitat is present in many of the Project treatment areas, and surrounding upland woodland habitat may serve as refugia for foothill yellow-legged frog, if present. Foothill yellow-legged frog may disperse up to 1 mile from a known aquatic breeding site (CDFW 2018).

Three non-listed amphibian SSC, Santa Cruz black salamander (*Aneides flavipunctatus niger*), California giant salamander (*Dicamptodon ensatus*), and red-bellied newt (*Taricha rivularis*) have been previously documented near several treatment areas (CDFW 2022a) and have a high potential to occur throughout the Project treatment areas. These species occur near wet drainages, streams, and seeps and utilize surrounding rocks, damp woody debris, and logs as upland refugia. Potentially suitable habitat for these species is described in Attachment D.

Treatment activities could result in direct and indirect impacts to all five special-status amphibian species potentially occupying upland refugia (i.e., woody debris, downed logs, burrows, underneath rocks, etc.) surrounding drainages in the treatment areas, especially those involving mechanical equipment or use of vehicles and equipment driving off established roads within 1 mile of a known or potential aquatic breeding feature.

SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated, which would reduce the potential for project activities to disturb ground supporting refugia occupied by amphibian species and would reduce the potential for impacts to these species. Additionally, implementation of MM BIO-2a would avoid take of California red-legged frog and foothill yellow-legged frog by conducting treatment outside occupied habitat or outside the sensitive period in the species’ life history. To determine if a given treatment area is within occupied habitat for these species, upland refugia surveys would be conducted prior to implementing treatment within 1 mile of a known or potential aquatic breeding feature. It is also recommended that no work be carried out in these areas when rain is forecast and until 48 hours after rainfall. These measures, and additional recommendations to avoid treatment during rain near potential California red-legged frog and foothill yellow-legged frog habitat, and to conduct upland



	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

refugia surveys within 300 feet of potential aquatic breeding habitat prior to implementing treatment, recommended in Attachment D, would help avoid take of California red-legged frog and foothill yellow-legged frog, in the unlikely event that these species occur in the vicinity of the treatment areas.

Any additional recommendations by CDFW or USFWS for avoiding take of these species will be incorporated into the project. Measures for avoiding take of California red-legged frog and foothill yellow-legged frog would also avoid impacts to Santa Cruz black salamander, California giant salamander, and red-bellied newt, which are not expected to occur far from aquatic habitats. The measures would essentially meet the purposes of MM BIO-2b, which provides protections for non-listed special-status amphibians.

The project could also result in modifications to habitats occupied by these species. However, no work is proposed in aquatic habitats and treatment would not alter the character of the habitats where treatment occurs.

**Special-Status Reptiles:** Two special-status reptiles, including one listed species, occur in the vicinity of the Project site. San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) is listed as endangered under FESA and CESA and is fully protected under the California Fish and Game Code (FGC) and has some potential to occur within a freshwater pond southeast of the Defensible Space Fuel Break Treatment Area O4D in Sanborn County Park. Additionally, there are documented occurrences of this species within the 7.5-minute quadrangle in which the Project site occurs (CDFW 2022a); specific locations are suppressed by the CNDDb, however. Vegetation surrounding this freshwater pond serves as suitable refugia habitat for this species.

One non-listed reptile SSC, western pond turtle (*Emys marmorata*), has been previously documented near several treatment areas with perennial drainages and freshwater ponds (CDFW 2022a). This species occurs in slow-moving permanent or intermittent drainages, ponds, lakes, and reservoirs, and utilizes surrounding upland habitat for nesting and refugia. Potentially suitable habitat for these species is described in Attachment D, and implementation of SPR BIO-10, which would involve conducting a focused survey for special-status wildlife, may result in identification of additional locations where these species occur.

Treatment activities could result in direct and indirect impacts to San Francisco garter snake, western pond turtle, and their habitat within certain treatment areas of the Project site. Project activities could result in injury or mortality of individual San Francisco garter snakes and western pond turtle, if present at the time of mechanical treatment, vegetation removal, and movement of large vehicles, which would be a violation of FESA and CESA (for San Francisco garter snake) and considered a significant impact to both species. Additionally, western pond turtle may bury eggs in dirt, sand, or leaf litter in upland habitats immediately adjacent to aquatic features, and such nests could be crushed by large vehicles.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

Implementation of MM BIO-2b would ensure establishment of no-disturbance buffers around the locations of any sites in which these species are detected. Due to implementation of SPRs meant to protect sensitive natural communities (SPR BIO-3), prevent the spread of plant pathogens (SPR BIO-6), and prevent the spread of invasive plants (SPR BIO-8), the project would not substantially affect the function of habitat for these species. Furthermore, implementation of MM BIO-3a would ensure treatment is designed to avoid loss of sensitive communities, in which these species may occur.

**Special-Status Birds.** Eight special-status bird species, including five listed or California fully protected species, are known to occur or may occur near the Project sites. The listed or fully protected species are golden eagle (*Aquila chrysaetos*) (protected under Bald and Golden Eagle Protection Act [BGEPA] and California fully protected), American peregrine falcon (*Falco peregrinus anatum*) (California fully protected), white-tailed kite (*Elanus leucurus*) (California fully protected), least bell’s vireo (*Vireo belli pusillus*) (FESA endangered, CESA endangered), and marbled murrelet (*Brachyramphus marmoratus*) (FESA threatened and CESA endangered). The remaining bird species are long-eared owl (*Asio otus*) and purple martin (*Progne subis*), both of which are California SSC.

The Project sites contain a variety of suitable nesting and foraging habitat for all of these special-status bird species, which is further described in Attachment D, and American peregrine falcon is known to nest on an annual basis within Summit rock (PlaceWorks 2019), within the proposed Treatment Area O6A. If any of these special-status bird species nest within or near the Project site treatment areas, noise and increased human activity associated with treatment activities could result in nest abandonment, which would result in the mortality of eggs or young if such activities occur during the bird nesting season (March through August). Any loss of active special-status bird nests would be a significant impact under CEQA. Additionally, Project-related disturbance leading to nest abandonment by the species protected by the FESA, CESA, or BGEPA would be in direct violation of these laws. However, implementation of SPR BIO-12, further described below, would reduce this impact to less than significant.

**Special-Status Bats.** Two non-listed bat SSC, pallid bat (*Antrozous pallidus*) and Townsend’s big-eared bat (*Coryorhinus townsendii*), may occur within the woodland and mixed forest habitats of the Project sites. Additionally, there are several documented occurrences of Townsend’s big-eared bat near the Project sites (CDFW 2022a). The Project may remove trees which may result in the permanent loss of active bat roosts, if present. Increased noise from chainsaws and other equipment during treatment activities could cause temporary disturbance-related impacts on any bats roosting within the Project sites if they perceive such noise as a threat. Such impacts would be considered significant if they caused abandonment of a maternity roost with dependent young, which would reduce reproductive success of the local population and contribute to ongoing population declines of these species. However, implementation of SPR BIO-10, further described below, would reduce this impact to less than significant.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

**Other Special-Status Mammals:** One additional mammal SSC, San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), and one California fully protected mammal, ringtail (*Bassariscus astutus*), may occur in woodland and riparian forest habitats that are present throughout the Project sites. The Project could result in impacts to these species, either by causing injury or harm to individuals of these species or substantially altering their habitats. Woodrats live in nests (middens) that are piles of stick and other material, constructed in woodland, chaparral, and forest habitat. Any treatment activity could result in injury, mortality, or displacement of these species. Ringtails occupy tree hollows, rock crevices, or other animals' abandoned burrows in mixed forest and woodland habitat. Much of the Project sites contain suitable habitat for this species. This species is highly mobile and may be able to escape treatment activities in many cases, but mechanical treatment within mixed forest and woodland habitat could result in crushing of occupied tree hollows or occupied burrows, including natal dens. Implementation of SPR BIO-10, to conduct a focused survey for special-status wildlife, would identify locations where these species occur.

Implementation of MM BIO-2b would ensure establishment of buffers around the locations of any middens of San Francisco dusky-footed woodrat or any tree hollows/dens occupied by ringtail.

**Special-status Invertebrates.** Special-status invertebrate species, such as monarch butterfly (*Danaus plexippus*), Crotch bumble bee (*Bombus crotchii*), and western bumble bee (*Bombus occidentalis occidentalis*), have a low potential, but may occur within project treatment areas. Implementation of MM BIO 2e and 2g, conducting pre-work surveys for butterfly host plants and special-status bumble bee species habitat, would identify locations where these species would occur, and the appropriate avoidance buffers would be implemented. Therefore, potential impacts to special-status invertebrates would be less than significant with mitigation incorporated.

Due to implementation of SPRs meant to protect sensitive natural communities (SPR BIO-3), avoid effects of habitat conversion of coastal scrub and chaparral (SPR BIO-5), prevent the spread of plant pathogens (SPR BIO-6), and prevent the spread of invasive plants (SPR BIO-8), the project would not substantially affect the function of habitat for these species. Furthermore, MM BIO-3a would ensure treatment is designed to avoid loss of sensitive communities. Therefore, potential impacts to special-status wildlife would be less than significant with mitigation incorporated.

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, pp. 3.6-187-3.6-192	SPR BIO-1, 2, 3, 4, 5, 6, 8, 9 SPR HYD-4, 5	PS	Yes	SPR BIO-1, 2, 3, 4, 5, 6, 9 SPR HYD-4	LTSM	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
		MM BIO-3a, 3b, 3c			MM BIO-3a		

**Impact Discussion:** Treatment conducted within the Project sites has the potential to result in impacts to sensitive natural communities. This could include loss of sensitive communities or oak woodlands, degradation through removal of dominant and characteristic vegetation, and conversion of sensitive communities to common vegetation types. Sensitive communities are defined in the Manual of California Vegetation Online (CNPS 2022) and the California Sensitive Natural Community List (CDFW 2022b). Communities with a state ranking of S1 to S3 are considered sensitive. Data review and reconnaissance surveys for all treatment areas were conducted in accordance with SPR BIO-1 (Attachment D). Vegetation communities mapped included numerous associations of the Douglas fir forest and woodland alliance, Douglas fir forest – tanoak forest and woodland alliance, bigleaf maple forest and woodland alliance, California bay forest and woodland alliance, redwood forest and woodland alliance, coyote brush scrub, and chamise chaparral; many of which are considered sensitive and are described in the California Sensitive Natural Community List (CDFW 2022b). A full list of the sensitive vegetation communities that are present throughout the Project site, and the specific associations of which they belong, are provided in Attachment D.

Coast live oak woodland and mixed oak woodland occurs in nearly all treatment areas, and it is considered protected per the CalVTP PEIR, despite global/state rankings of G5/S4.

Two riparian vegetation communities—associations of the Bigleaf maple forest and woodland alliance and the Goodding’s willow – red willow riparian woodland and forest alliance—occur in Treatment Areas 01E, 06B, 09, and 10, adjacent to aquatic features. Treatment activities within these areas may have significant impacts on riparian habitat if substantial vegetation is removed from these communities.

Treatment Areas 01B, 04A, 04B, 05A, and 13 do not contain sensitive natural communities (per the California Sensitive Natural Community List), oak woodland, or riparian habitat.

For the treatment areas that contain riparian vegetation as previously described, SPR BIO-4 would be implemented to ensure that treatment is designed to avoid these areas. SPR BIO-5 would ensure that treatment is designed to maintain or enhance habitat function of chaparral communities. And SPR BIO-6 requires that best management practices be employed to avoid spread of plant pathogens, while SPR BIO-9 prescribes actions to prevent the spread of invasive plants.



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In addition to these requirements, mitigation measures would be implemented to ensure impacts to riparian habitats, sensitive natural communities, and oak woodlands are reduced to less than significant. MM BIO-3a would ensure that treatment is designed to avoid loss of sensitive natural communities and oak woodlands, including enhancement of communities to restore the natural fire regime and vegetation composition and structure. MM BIO-3b and MM BIO-3c, which relate to compensation for loss of sensitive natural communities and oak woodlands and of riparian habitat, respectively, may be necessary to be implemented, if loss of sensitive natural communities and oak woodlands cannot be avoided. Per SPR BIO-3, the only exception to compensatory mitigation 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. As described in Section 7.1 of the FHP and as determined by a Registered Professional Forester (Dudek 2023), treatments would be designed to promote forest health and the reestablishment of native tree species.

For oak woodlands, the treatment proposes to increase vertical separation between the top of surface fuels and lowest tree branches. The vertical separation between the top of surface fuels and the lowest tree branch should be at least 8 feet. No oak trees will be removed. Work within several treatment areas proposes to conduct substantial work within sensitive forest and woodland natural communities, including removal of trees, to create space between remaining trees, in addition to treatment of understory vegetation. Treatment within these areas, however, is designed to improve forest health by reducing stand density and removing the heavy dead/downed component of the forest. A combination of mechanical and hand treatment activities would be implemented and encroaching Douglas-fir would be targeted for removal, unless removal is not feasible without damage to retained oaks, or if removal is cost prohibitive. Where oak woodland abuts brush/chaparral, horizontal spacing would be created between the outward oak canopy edge and the nearest shrub equal to three times the adjacent shrub height. In more open oak woodlands where small trees, shrubs, and grasses exist beneath tree canopies (surface fuels), the vertical separation between the top of surface fuels and the lowest tree branch would be at least three times the height of the surface fuels. Cut vegetation would be chipped and hauled away, placed in piles for burning at an appropriate time, or burned in an air curtain burner. A variety of tree species in the extensive stands throughout the treatment areas would be retained, as long as they do not pose a risk of falling on public roads, access roads, pedestrian trails, and or public recreational spaces (i.e., campgrounds and picnic areas), if they can be pruned and limbed and ladder fuels can be removed. It is anticipated that some areas within the Project sites would not be accessible due to steep slopes, and additional trees would be left in place in such areas. The overall acreage occupied by the sensitive natural communities described above and in Attachment D would not be reduced. The approach to treatment would promote forest health, and thus would enhance the existing communities. By retaining mature, healthy trees, and through implementation of SPRs described above, treatment would retain the species composition

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and essential character of the forest. Additionally, the treatment would not exceed the maximum 20% threshold outlined in MM BIO-3a for removal of native vegetation within a sensitive natural community.

With implementation of the above SPRs and mitigation measures, impacts to sensitive natural communities occurring within the project site would be less than significant.

<b>Impact BIO-4:</b> Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, pp. 3.6-192-3.6-193	<u>SPR BIO-1</u> <u>SPR HYD-1, 3, 4</u> <u>MM BIO-4</u>	PS	Yes	<u>SPR BIO-1</u> <u>SPR HYD-1, 4</u> <u>MM BIO-4</u>	LTSM	<input checked="" type="checkbox"/>
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An aquatic resources delineation was not conducted for the Project site; however, the National Wetlands Inventory (USFWS 2022) identifies several aquatic resources potentially subject to U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or CDFW jurisdiction throughout the Project site. Potentially jurisdictional aquatic resources may be regulated under the Clean Water Act, Porter-Cologne Water Quality Act, and/or Section 1602 of the California FGC. Within Upper Stevens Creek County Park, runoff from the steep terrain is channeled into ephemeral drainages and ravines that flow northeast towards Stevens Creek, generally outside of the Project site. Within Sanborn County Park, numerous ephemeral, intermittent, and perennial drainages channel runoff from the rugged, sloping terrain northeast towards major tributary drainages to Saratoga Creek, including Booker Creek, Bonjetti Creek, McElroy Creek, Todd Creek, Aubry Creek, and Sanborn Creek. Portions of Bonjetti, Todd, Aubry, and Sanborn Creeks occur within the Project site. Lyndon Canyon Creek and its unnamed tributaries, portions of which occur within the Project site, drain the southern portion of Sanborn County Park in a southeasterly direction toward Lexington Reservoir. Lake Ranch Reservoir is an impoundment of Lyndon Canyon that collects runoff from the numerous surrounding drainages and supports perennial hydrology and adjacent wetland areas. Additional details about these features are provided in Attachment D.

If treatment activities are not designed to fully avoid state or federally protected wetlands, then there may be potentially significant direct impacts to these features from vegetation removal, ground disturbance, erosion to drainage banks caused by machinery and foot traffic, and changes to water quality from runoff and debris from surrounding treatment activities.

However, as described in the CalVTP PEIR, implementation of water quality protections in accordance with SPR HYD-1, identification of Watercourse and Lake Protection Zones (WLPZs) in accordance with SPR HYD-4, and delineation and avoidance of state and federally protected aquatic resources in

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accordance with MM BIO-4 would ensure no impacts to the identified features. With implementation of these SPRs and the mitigation measures, impacts to state and federally protected aquatic resources from the Project would be less than significant with mitigation incorporated.

<b>Impact BIO-5:</b> Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	Impact BIO-5, pp. 3.6-193-3.6-197	<u>SPR BIO-</u> 1, 4, 5, 10, 11 <u>SPR HYD-</u> 1, 4 <u>MM BIO-</u> 5	PS	Yes	<u>SPR BIO-</u> 1, 4, 5, 10, <u>SPR HYD-</u> 1, 4 <u>MM BIO-</u> 5	LTSM	<input checked="" type="checkbox"/>
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**Impact Discussion:** The Project sites occur within a large block of undeveloped land within the Santa Cruz Mountains. Some fenced facilities associated with private development occur within or adjacent to the Project sites, and barbed-wire fences occur along property lines in various locations. However, few impediments occur to large or small wildlife throughout the area. Larger and medium-size wildlife are likely to be limited in their movements only by steep terrain and dense vegetation, where these features occur. Mule deer (*Odocoileus hemionus*) is likely the primary larger species occurring within the Project sites. Mountain lion (*Puma concolor*), a candidate for listing under CESA and a wide-ranging species, also likely occurs in the area on occasion. As previously described under Impacts BIO-3 and BIO-4, the Project sites contain numerous aquatic features and adjacent riparian habitat, which are likely used by wildlife species as corridors for both local and regional movement events, as well as important nursery sites for wildlife such as amphibians, fish, and many bird and invertebrate species. However, with the SPRs and MMs that will be implemented under Impacts BIO-3 and BIO-4, to fully avoid aquatic resources and riparian habitat, no substantial direct impacts to local or regional wildlife movement are expected to occur as a result of the treatment projects.

As previously described under Impact BIO-2, special-status bat species have potential to roost throughout the Project sites, and in addition, several common bat species may use cavities of trees and various structures throughout the Project sites for maternity roosts. In general, the Project sites contain several rock outcrops and trees with large cavities that could serve as important nursery sites for special-status and common bat species. The Project may remove trees which may result in the permanent loss of active bat roosts, if present. Increased noise from chainsaws and other equipment during treatment activities could cause temporary disturbance-related impacts on any bats roosting within the Project sites if they perceive such noise as a threat. Such impacts would be considered significant if they caused abandonment of a maternity roost with dependent young, which would reduce

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reproductive success of the local population and contribute to ongoing population declines of these species. However, implementation of SPR BIO-10, which requires focused or protocol-level surveys for special-status wildlife species or nursery sites (including bat maternity roosts), would reduce this impact to less than significant.

Short-term effects of treatment, including hand treatment, limbing of trees, mechanical treatment, and prescribed burning, could cause wildlife to avoid the Project site temporarily and disrupt wildlife movement. However, wildlife using the area for movement would have access to the extensive undeveloped surrounding lands during treatment. Project treatment would not create long-term barriers to wildlife movement and would not result in habitat changes that would limit movement. Implementation of SPR BIO-10 will ensure protocol surveys for special-status wildlife or wildlife nursery sites are conducted. Implementation of MM BIO-5 would ensure avoidance of nursery sites and establishment of buffers. Implementation of these measures would reduce any potential impacts to less than significant.

<b>Impact BIO-6:</b> Substantially Reduce Habitat or Abundance of Common Wildlife, Including Nesting Birds	Impact BIO-6, pp. 3.6-197-3.6-199	<u>SPR BIO-</u> 1, 2, 3, 4, 5, 12	LTS	Yes	<u>SPR BIO-</u> 1, 2, 3, 4, 5, 12	LTS	<input checked="" type="checkbox"/>
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The project could result in direct and indirect impacts to common wildlife, including nesting birds. The various habitats that occur within the project site, consisting mostly of Douglas fir forest and woodland, redwood forest and woodland, oak woodland, and limited areas of grassland and chaparral, support a variety of common wildlife, including nesting birds. All treatment activities, including manual treatment and limbing of oaks and pines, mechanical treatment, and prescribed burning, if conducted during the nesting bird season (March through August), could result in direct loss of active bird nests or cause disturbance (i.e., noise and increased human presence) resulting in nest abandonment and failure.

Extensive areas of similar habitats occur adjacent to the Project sites, such that substantial similar habitats will remain in surrounding areas that are available to common wildlife species during and after treatment. In addition, implementation of SPR BIO-1, SPR BIO-2, SPR BIO-3, and SPR BIO-5 would limit the loss and degradation of high-quality habitat for common species within the project site. SPR BIO-2 would require worker training in sensitive biological resources. SPR BIO-3 would ensure mapping of sensitive habitats. SPR BIO-5 would avoid type conversion in scrub habitats and therefore maintain habitat function. Therefore, project treatment would remove vegetation and alter habitat structure locally but would not result in permanent habitat degradation or conversion. Vegetation would be retained in a mosaic pattern in forest and woodland communities, and quality of



	PEIR Specific			Project Specific			
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habitat may improve in the long term in some cases. Overall diversity and abundance of common birds and other wildlife would not substantially change in the long term.

For nesting birds, implementation of SPR BIO-12 would require a survey for common nesting birds prior to treatment, if avoiding the nesting season is not possible. A qualified biologist will review a list of the common nesting birds, including raptors, in the vicinity, using available data sources. See Attachment D for a list of common birds that likely nest within the project site. For any nests found, SPR BIO-12 requires establishment of buffers and modification and deferral of treatment in the vicinity of the nests.

No mitigation measures are required to address this impact, and with implementation of the SPRs noted above, this impact would be less than significant.

<b>Impact BIO-7:</b> Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, pp. 3.6-199	<u>SPR AD-3</u>	No Impact	Yes	<u>SPR AD-3</u>	N/A	<input checked="" type="checkbox"/>
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The Santa Clara County Code of Ordinances Division C116 (Santa Clara County 2006) identifies the importance of preserving Santa Clara County’s trees on private and public properties so that the County’s tree cover can be maintained, so that property values are protected, to prevent erosion and reduce flood and landslide hazard, offer wildlife habitat, and much more (Santa Clara County 2006). The ordinance regulates tree removal and identifies County protected trees, and requires a permit process for removing protected trees, and poses restrictions of commercial and heritage tree removal. Any tree removal or pruning for the maintenance, operation, or development of County Parks property under established policies or procedures approved by the Director of the Parks and Recreation Department are exempt from the review and permitting requirements of Ordinance Code Division C.16.

This Project will focus on retention of native trees as best as possible, and only the maximum necessary trees will be removed by the project. In addition, the Project will be designed to incorporate all provisions of the County Code Ordinances, therefore the project will not conflict with any local policies or ordinances.

No mitigation measures are required to address this impact. The Project will implement SPR AD-3 to be sure that all aspects of the Project are consistent with all local plans, policies, and ordinances. By implementing SPR AD-3, and the Project’s design to retain native trees, the Project would result in no impact to local policies or ordinances.

<b>Impact BIO-8:</b> Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	Impact BIO-8, pp. 3.6-199 – 3.6-200	N/A	No Impact	No	N/A	N/A	<input checked="" type="checkbox"/>
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No natural community conservation plans, habitat conservation plans, or other approved habitat plans occur within the Project sites.

<b>Other Impacts to Biological Resources:</b> Would the project result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	—	—	—	No	N/A	N/A	<input checked="" type="checkbox"/>
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Site-specific characteristics of the proposed Project are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR Section 3.6, and no new impacts related to biological resources would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR BIO-1: Review and Survey Project-Specific Biological Resources.</b> 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. 2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. This SPR applies to all treatment activities and treatment types.	Yes Yes No	Prior	SCC Parks
<b>SPR BIO-2: Require Biological Resource Training for Workers.</b> 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	Prior	SCC Parks
<b>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.</b> 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	Prior	SCC Parks

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.</b> 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	Prior	SCC Parks
<b>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.</b> 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	Prior-During	SCC Parks
<b>SPR BIO-6: Prevent Spread of Plant Pathogens.</b> When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement best management practices to prevent the spread of <i>Phytophthora</i> and other plant pathogens (e.g., pitch canker ( <i>Fusarium</i> ), goldspotted oak borer, shot hole borer, bark beetle). This SPR applies to all treatment activities and treatment types.	Yes	During	SCC Parks
<b>SPR BIO-7: Survey for Special-Status Plants.</b> 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	Prior	SCC Parks
<b>SPR BIO 8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs.</b> When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	No	N/A	N/A

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.</b> This SPR applies to all treatment activities and treatment types.	Yes	During	SCC Parks
<b>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.</b> 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	Prior	SCC Parks
<b>SPR BIO-11: Install Wildlife-Friendly Fencing (Prescribed Herbivory).</b> If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR BIO-12. Protect Common Nesting Birds, Including Raptors.</b> 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	Prior-During	SCC Parks
<b>MM BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA</b> 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	Prior-During	SCC Parks
<b>MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</b>	Yes	Prior-During	SCC Parks



	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
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.			
<b>MM BIO-1c: Compensate of unavoidable Loss of Special-Status Plants</b> 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. 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	N/A	N/A
<b>MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)</b>	Yes	Prior-During	SCC Parks
<b>MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</b> 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	Prior-During	SCC Parks

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>MM BIO-2c Compensate for Mortality, Injury, Or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</b> 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.	No	<u>N/A</u>	<u>N/A</u>
<b>MM-BIO-2d Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Types).</b>	No	<u>N/A</u>	<u>N/A</u>
<b>MM BIO-2e Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Types).</b>	Yes	<u>Prior</u>	<u>SCC Parks</u>
<b>MM BIO 2f Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities).</b>	No	<u>N/A</u>	<u>N/A</u>
<b>MM Bio-2g design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities).</b>	Yes	<u>Prior</u>	<u>SCC Parks</u>
<b>MM Bio-2h Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)</b>	No	<u>N/A</u>	<u>N/A</u>
<b>MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</b> The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to  <b>SPR BIO-3:</b>  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	Yes	Prior-During	SCC Parks

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.			
<b>MM BIO-3b Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</b>	No	<u>N/A</u>	<u>N/A</u>
<b>MM BIO-3c Compensate for Unavoidable Loss of Riparian Habitat</b>	No	<u>N/A</u>	<u>N/A</u>
<b>MM BIO-4: Avoid State and Federally Protected Wetlands</b>	Yes	Prior-During	SCC Parks
<b>MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</b>	Yes	Prior-During	SCC Parks

**Table 3. Special-Status Plant Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	None/None/1B.2	Cismontane woodland, coastal bluff scrub, valley and foothill grassland/annual herb/Mar-June/10-1,640	<b>Low potential to occur.</b> The woodland on site provides potentially suitable habitat for this species. There is one previously documented occurrence located northeast of Lexington Reservoir approximately 2 miles east of Sanborn County Park (CDFW 2022a).
<i>Arctostaphylos andersonii</i>	Anderson's manzanita	None/None/1B.2	Broadleafed upland forest, chaparral, North Coast coniferous forest; edges, openings/perennial evergreen shrub/Nov-May/195-2,490	<b>Moderate potential to occur.</b> Forest and chaparral on site provide suitable habitat for this species. There are numerous documented occurrences within the Big Basin U.S. Geological Survey 7.5-minute quad, the closest of which is a historical occurrence along Highway 9 approximately 1.5 miles east of Upper Stevens Creek County Park (CDFW 2022a).
<i>Arctostaphylos glutinosa</i>	Schreiber's manzanita	None/None/1B.2	Chaparral, closed-cone coniferous forest/perennial evergreen shrub/Mar-Apr(Nov)/560-2,245	<b>Not expected to occur.</b> Although the chaparral and forest provide potentially suitable habitat, there are no suitable soils on site. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Arctostaphylos ohloneana</i>	Ohlone manzanita	None/None/1B.1	Closed-cone coniferous forest, coastal scrub/evergreen shrub/ Feb-Mar/1,475-1,735	<b>Not expected to occur.</b> Although the forest provides potentially suitable habitat, there are no suitable soils on site. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Arctostaphylos regismontana</i>	Kings Mountain manzanita	None/None/1B.2	Broadleafed upland forest, chaparral, North Coast coniferous forest; granitic, sandstone/perennial evergreen shrub/Dec-Apr/ 1,000-2,395	<b>High potential to occur.</b> The forest and chaparral on site provide suitable habitat for this species. This species has been previously documented in Upper Stevens Creek County Park, but the occurrence was observed in the 1920s (CDFW 2022a).
<i>Arctostaphylos silvicola</i>	Bonny Doon manzanita	None/None/1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest/perennial evergreen shrub/Jan-Mar/395-1,965	<b>Not expected to occur.</b> The site does not contain any suitable sandy inland marine soils.
<i>Arenaria paludicola</i>	marsh sandwort	FE/SE/1B.1	Marshes and swamps; openings, sandy/perennial stoloniferous herb/May-Aug/10-560	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Calyptidium parryi</i> var. <i>hesseae</i>	Santa Cruz Mountains pussypaws	None/None/1B.1	Chaparral, cismontane woodland; gravelly (sometimes), openings, sandy (sometimes)/annual herb/May-Aug/1,000-5,015	<b>Not expected to occur.</b> Although the chaparral and woodland on site provide potentially suitable habitat for this species, sandy or gravelly soils are limited. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	None/None/1B.1	Valley and foothill grassland/annual herb/May-Oct(Nov)/0-755	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>	Ben Lomond spineflower	FE/None/1B.1	Lower montane coniferous forest/annual herb/Apr-July/ 295-2,000	<b>Not expected to occur.</b> There are no suitable sandhill soils on site. The site is outside the known geographic range of this species.
<i>Chorizanthe robusta</i> var. <i>hartwegii</i>	Scotts Valley spineflower	FE/None/1B.1	Meadows and seeps, valley and foothill grassland/annual herb/ Apr-July/755-805	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Chorizanthe robusta</i> var. <i>robusta</i>	robust spineflower	FE/None/1B.1	Chaparral, cismontane woodland, coastal dunes, coastal scrub; gravelly (sometimes), sandy (sometimes)/annual herb/ Apr-Sep/10-985	<b>Not expected to occur.</b> Although the chaparral and woodland on site provide potentially suitable habitat for this species, serpentine soils are absent. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Cirsium fontinale</i> var. <i>campylon</i>	Mt. Hamilton thistle	None/None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland; seeps, serpentinite/perennial herb/(Feb)Apr-Oct/330-2,915	<b>Not expected to occur.</b> The site is outside of the species' known geographic range and there are no serpentine soils present.
<i>Collinsia multicolor</i>	San Francisco collinsia	None/None/1B.2	Closed-cone coniferous forest, coastal scrub; serpentinite (sometimes)/annual herb/(Feb)Mar-May/100-900	<b>Not expected to occur.</b> Suitable habitat and soils for this species are absent.

**Table 3. Special-Status Plant Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Dirca occidentalis</i>	western leatherwood	None/None/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, North Coast coniferous forest, riparian forest, riparian woodland; mesic/perennial deciduous shrub/Jan-Mar(Apr)/80-1,390	<b>High potential to occur.</b> The forest, chaparral, and woodland habitat on site provide suitable habitat for this species. There are numerous documented occurrences of this species within Santa Clara County, the closest of which is along Stevens Creek Reservoir, approximately 2 miles east of Upper Stevens Creek County Park (CDFW 2022a).
<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	Santa Clara Valley dudleya	FE/None/1B.1	Cismontane woodland, valley and foothill grassland; rocky, serpentinite/perennial herb/Apr-Oct/195-1,755	<b>Not expected to occur.</b> Although the woodland and grassland on site provide potentially suitable habitat for this species, there are no serpentine soils present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Eriophyllum latilobum</i>	San Mateo woolly sunflower	FE/SE/1B.1	Cismontane woodland, coastal scrub, lower montane coniferous forest/perennial herb/May-June/150-1,080	<b>Moderate potential to occur.</b> The woodland and forest on site provide suitable habitat for this species. There is one previously documented occurrence along Skyline Boulevard, approximately 4 miles north of Upper Stevens Creek County Park (CDFW 2022a).
<i>Erysimum teretifolium</i>	Santa Cruz wallflower	FE/SE/1B.1	Chaparral, lower montane coniferous forest/perennial herb/Mar-July/395-2,000	<b>Not expected to occur.</b> The site is outside of the species' known geographic range.
<i>Fissidens pauperculus</i>	minute pocket moss	None/None/1B.2	North Coast coniferous forest/moss//35-3,355	<b>Moderate potential to occur.</b> The forest on site provides potentially suitable habitat for this species. There is one previously documented occurrence approximately 1 mile west of Upper Steven's Creek County Park (CDFW 2022a).
<i>Fritillaria liliacea</i>	fragrant fritillary	None/None/1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland; serpentinite (often)/perennial bulbiferous herb/ Feb-Apr/10-1,345	<b>Not expected to occur.</b> Although the woodland and grassland on site may provide potentially suitable habitat for this species, serpentine soils are not present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Grimmia torenii</i>	Toren's grimmia	None/None/1B.3	Chaparral, cismontane woodland, lower montane coniferous forest; carbonate, openings, rocky, volcanic/moss//1,065-3,805	<b>Not expected to occur.</b> Although the chaparral, woodland, and forest on site provides potentially suitable habitat for this species, there are no serpentine soils present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Grimmia vaginulata</i>	vaginulate grimmia	None/None/1B.1	Chaparral; carbonate, rocky/moss/2,245-2,245	<b>Not expected to occur.</b> Although rocky boulder and rock wall habitat is present within Sanborn County Park, this species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie/annual herb/Mar-June/0-705	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Hesperocyparis abramsiana</i> var. <i>abramsiana</i>	Santa Cruz cypress	FT/SE/1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest; granitic (sometimes), sandstone (sometimes)/perennial evergreen tree//920-2,620	<b>Not expected to occur.</b> Although the chaparral and forest on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Hesperocyparis abramsiana</i> var. <i>butanoensis</i>	Butano Ridge cypress	FT/SE/1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest; sandstone/perennial evergreen tree/Oct/1,310-1,605	<b>Not expected to occur.</b> Although the chaparral and forest on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Hoita strobilina</i>	Loma Prieta hoita	None/None/1B.1	Chaparral, cismontane woodland, riparian woodland; mesic, serpentinite (usually)/perennial herb/May-July(Aug-Oct)/100-2,820	<b>Moderate potential to occur.</b> The chaparral and woodland on site provide potentially suitable habitat, but serpentine soils are not present. There are numerous documented occurrences of this species within Santa Clara County, the closest of which is approximately 2 miles east of Sanborn County Park (CDFW 2022a).
<i>Legenere limosa</i>	legenere	None/None/1B.1	Vernal pools/annual herb/Apr-June/5-2,885	<b>Not expected to occur.</b> No suitable vernal pool habitat present.
<i>Lessingia micradenia</i> var. <i>glabrata</i>	smooth lessingia	None/None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland; roadsides (often), serpentinite/annual herb/(Apr-June)July-Nov/395-1,375	<b>Not expected to occur.</b> Although the chaparral, woodland, and grassland on site provide potentially suitable habitat for this species, there are no serpentine soils present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).



**Table 3. Special-Status Plant Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Malacothamnus arcuatus</i>	arcuate bush-mallow	None/None/1B.2	Chaparral, cismontane woodland/perennial deciduous shrub/ Apr-Sep/50-1,160	<b>High potential to occur.</b> The chaparral and woodland on site provide suitable habitat for this species. There are numerous documented occurrences of this species within Santa Clara County, the closest of which is within 1 mile of Upper Stevens Creek County Park (CDFW 2022a).
<i>Monolopia gracilens</i>	woodland woollythreads	None/None/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, North Coast coniferous forest, valley and foothill grassland; serpentinite/ annual herb/ (Feb)Mar-July/330-3,935	<b>High potential to occur.</b> The forest, chaparral, woodland, and grassland on site provide suitable habitat for this species, although serpentine soils are not present. A historic (1904) documented occurrence of this species overlaps with the southeastern corner of Sanborn County Park (CDFW 2022a).
<i>Orthotrichum kellmanii</i>	Kellman's bristle moss	None/None/1B.2	Chaparral, cismontane woodland; carbonate, sandstone/moss/ Jan-Feb/1,125-2,245	<b>Not expected to occur.</b> Although chaparral and woodland on site may provide potentially suitable habitat for this species, suitable soils are limited. This species has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Pedicularis dudleyi</i>	Dudley's lousewort	None/SR/1B.2	Chaparral, cismontane woodland, North Coast coniferous forest, valley and foothill grassland/perennial herb/Apr-June/195-2,950	<b>Moderate potential to occur.</b> The woodland and forest on site provides potentially suitable habitat for this species. There is one previously documented occurrence along Bear Creek, approximately 3 miles west of Upper Steven's Creek County Park (CDFW 2022a).
<i>Penstemon rattanii</i> var. <i>kleei</i>	Santa Cruz Mountains beardtongue	None/None/1B.2	Chaparral, lower montane coniferous forest, North Coast coniferous forest/perennial herb/May-June/1,310-3,605	<b>Not expected to occur.</b> Although the chaparral and forest on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	FE/SE/1B.1	Cismontane woodland, valley and foothill grassland/annual herb/ Mar-May/115-2,030	<b>Not expected to occur.</b> Although the woodland and grassland on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Piperia candida</i>	white-flowered rein orchid	None/None/1B.2	Broadleafed upland forest, lower montane coniferous forest, North Coast coniferous forest; serpentinite (sometimes)/perennial herb/ (Mar)May-Sep/100-4,295	<b>Moderate potential to occur.</b> The forest on site provides suitable habitat for this species, but serpentine soils are not present. There is one previously documented occurrence approximately 2.5 miles north of Upper Stevens Creek County Park (CDFW 2022a).
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	Choris' popcornflower	None/None/1B.2	Chaparral, coastal prairie, coastal scrub; mesic/annual herb/ Mar-June/10-525	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Plagiobothrys glaber</i>	hairless popcornflower	None/None/1A	Marshes and swamps, meadows and seeps/annual herb/ Mar-May/50-590	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Polygonum hickmanii</i>	Scotts Valley polygonum	FE/SE/1B.1	Valley and foothill grassland/annual herb/May-Aug/690-820	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	None/None/1B.2	Marshes and swamps/perennial rhizomatous herb (emergent)/ May-Oct(Nov)/0-2,130	<b>Moderate potential to occur.</b> There is suitable freshwater pond and emergent wetland habitat on site. There is one previously documented occurrence along Aldercroft Creek, approximately 2.5 miles east of Sanborn County Park (CDFW 2022a).
<i>Sanicula saxatilis</i>	rock sanicle	None/SR/1B.2	Broadleafed upland forest, chaparral, valley and foothill grassland; rocky, scree, talus/perennial herb/Apr-May/2,030-3,850	<b>Not expected to occur.</b> Although the forest, chaparral, and grassland on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Senecio aphanactis</i>	chaparral ragwort	None/None/2B.2	Chaparral, cismontane woodland, coastal scrub; alkaline (sometimes)/annual herb/Jan-Apr(May)/50-2,620	<b>Low potential to occur.</b> There is suitable chaparral and woodland habitat on site. There is one previously documented occurrence in Foothills Park, approximately 3.5 miles north of Upper Stevens Creek County Park (CDFW 2022a).
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	None/None/1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland; openings, serpentinite (sometimes)/annual herb/Apr-May/ 35-1,640	<b>Not expected to occur.</b> Although the forest, chaparral, and grassland on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022a).
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewelflower	None/None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland; serpentinite/annual herb/(Mar)Apr-Sep(Oct)/310-3,280	<b>Low potential to occur.</b> Although the chaparral, woodland, and grassland on site may provide potentially suitable habitat for this species, serpentine soils are not present.

**Table 3. Special-Status Plant Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				There is one previously documented occurrence northeast of Lexington Reservoir, approximately 2 miles east of Sanborn County Park (CDFW 2022a).
<i>Trifolium buckwestiorum</i>	Santa Cruz clover	None/None/1B.1	Broadleafed upland forest, cismontane woodland, coastal prairie; gravelly/annual herb/Apr–Oct/345–2,000	<b>Moderate potential to occur.</b> There is suitable forest and woodland habitat on site. There is one previously documented occurrence along Aldercroft Creek, approximately 3.5 miles west of Sanborn County Park (CDFW 2022a).
<i>Trifolium polyodon</i>	Pacific Grove clover	None/SR/1B.1	Closed-cone coniferous forest, coastal prairie, meadows and seeps, valley and foothill grassland; granitic (sometimes), mesic/annual herb/Apr–June(July)/15–1,390	<b>Not expected to occur.</b> Suitable habitat for this species on site is limited, and it has not been previously documented within 5 miles of the Project site (CDFW 2022a).

**Status Legend**

**Federal**

FE: Federally listed as endangered

FT: Federally listed as threatened

**State**

SE: State listed as endangered

SR: State listed as rare

CRPR: California Rare Plant Rank

1A: Plants presumed extirpated in California and either rare or extinct elsewhere

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

**Threat Rank**

0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

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

0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

**Table 4. Special-Status Wildlife Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<b>Amphibians</b>				
<i>Ambystoma californiense</i> pop. 1	California tiger salamander - central California DPS	FT/ST, WL	Annual grassland, valley–foothill hardwood, and valley–foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and human-made pools if predatory fishes are absent.	<b>Not expected to occur.</b> The Sanborn and Upper Stevens Creek Project (Project) site does not contain suitable vernal pool or ephemeral pool breeding habitat for this species. The nearest documented occurrence is approximately 3.3 miles northeast of the proposed Charcoal Road–Table Mountain Shaded Fuel Break Area (Area 03B), a historic 1893 record from within Permanente Creek (Occ. No. 337) (CDFW 2022a).
<i>Aneides flavipunctatus niger</i>	Santa Cruz black salamander	None/SSC	Restricted to mesic forests in the fog belt of the outer Coast Range of San Mateo, Santa Cruz, and Santa Clara Counties. Mixed deciduous and coniferous woodlands and coastal grasslands. Occurs in moist streamside microhabitats and is found under rocks, talus, and damp woody debris.	<b>High potential to occur.</b> The Project site contains suitable mixed deciduous and coniferous woodlands with moist streamside habitats for this species. The species has been documented on numerous occasions in proximity to both Project site, along Highway 9, within Saratoga Creek, and adjacent to Stevens Canyon Road (CDFW 2022a).
<i>Dicamptodon ensatus</i>	California giant salamander	None/SSC	Known from wet coastal forests and chaparral 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.	<b>High potential to occur.</b> The Project site contains suitable wet coastal forests with numerous streams and seeps for breeding and refugia. There are several documented occurrences of this species within the Lyndon Canyon area of Sanborn County Park (CDFW 2022a).
<i>Rana boylei</i> pop. 4	foothill yellow-legged frog - central coast DPS	FPT/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland.	<b>Low potential to occur.</b> Rocky streams habitat is present for this species within forest and woodland habitats of the Project site, but open banks with minimal shade and cobble substrate is limited for this species. This species has been historically (prior to 1960)

**Table 4. Special-Status Wildlife Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				documented in the vicinity of Sarataga and Stevens Creeks (Occ. Nos. 2081 and 2081), but it is now believed that the species is extirpated from these areas (CDFW 2022a).
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	<b>Moderate potential to occur.</b> Lowland streams within riparian woodlands is present throughout the Project site, but the grade is steep, and deep pooling was not observed within the streams. Additionally, the streams are heavily shaded, preventing suitable locations for egg growth and basking for this species. One freshwater pond southeast of Defensible Space Fuel Break 04D in Sanborn County Park may provide suitable breeding habitat for this species, but this location is surrounded by paved pedestrian trails and has high pedestrian activity. This species may use the drainages and associated upland areas within the Project site for foraging and dispersal. This species has been documented approximately 1.4 miles northeast of Sanborn County Park within Saratoga Creek, a historical occurrence from 1997 (Occ. No. 211) (CDFW 2022a). This species has also historically been known to breed in Calabasas Creek, approximately 1.2 miles north of the Sanborn County Park Project site; individuals were documented breeding in 2007 (Occ. No. 961) (CDFW 2022a).
<i>Taricha rivularis</i>	red-bellied newt	None/SSC	Redwood forests (and sometimes other forest types) along coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Lives in terrestrial habitats; juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 kilometer to breed, typically in streams with moderate flow and clean rocky substrate.	<b>High potential to occur.</b> Streams and drainages throughout the redwood forests of the Project site provide suitable habitat for this species. This species has been documented on numerous occasions within Upper Stevens Creek County Park, along Grizzly Flat Trailhead and Upper Stevens Creek between 2010 and 2016 (Occ. No. 135) (CDFW 2022a).
<b>Birds</b>				
<i>Aquila chrysaetos</i> (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats.	<b>Low potential to nest and forage.</b> Suitable nesting habitat for this species is present in steep riparian areas within the Project site, but the lack of open grassland and pastures within the Project site likely precludes this species from occurring. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a). This species has been documented on numerous occasions by citizen scientists flying over Lake Ranch Reservoir within Sanborn County Park, with the most recent observation from March 2022 (eBird 2022).
<i>Asio otus</i> (nesting)	long-eared owl	BCC/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats.	<b>Moderate potential to nest, low potential to forage.</b> High-quality, suitable riparian nesting habitat with live oak thickets is present for this species throughout the Project site, but open foraging habitat is absent. There is a historical occurrence approximately 1.7 miles northwest of the Upper Stevens Creek Project site, a nesting record from 1986 (Occ. No. 37) (CDFW 2022a).
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	<b>Not expected to nest or forage.</b> The Project site lacks open grassland and scrub habitat with ground squirrel burrows as required for this species. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<i>Brachyramphus marmoratus</i> (nesting)	marbled murrelet	FT/SE	Nests in old-growth coastal forests; forages in subtidal and pelagic habitats.	<b>Moderate potential to nest, not expected to forage.</b> Forest habitat throughout the Project site may contain suitable nesting habitat for this species, but old-growth forest is absent. Critical habitat for this species is located just outside of the Sanborn County Park Project site, west of Skyline Boulevard within Castle Rock State Park. The nearest document occurrence of this species is approximately 2.5 miles west of the Upper Stevens Creek County Park Project site, an occupied nest site within Portola Redwoods State Park from 2007 (Occ. No. 30) (CDFW 2022a).
<i>Elanus leucurus</i> (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.	<b>Moderate potential to nest, not expected to forage.</b> High-quality and suitable woodland and riparian nesting habitat is present throughout the Project site, but open grassland and meadows for foraging are absent. The nearest documented nesting occurrence is approximately 4.7 miles northeast of Upper Stevens Creek County Park Project site from

**Table 4. Special-Status Wildlife Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				2007, a pair observed nesting within Stevens Creek (Occ. No. 85) (CDFW 2022a). A few individuals of this species were documented by citizen scientists within the vicinity of Sanborn County Park in 2019 (eBird 2022).
<i>Empidonax traillii extimus</i> (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	<b>Not expected to nest or forage.</b> Riparian canopy along streams is present throughout the Project site, but the habitat is fairly open and fragmented, and the species prefers more dense vegetation with riparian thickets. Additionally, the species is more commonly associated with the Cascade and Sierra Mountain ranges (Zeiner et. al. 1988-1990). There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<i>Falco peregrinus anatum</i> (nesting)	American peregrine falcon	FPD/FP, SCD	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present.	<b>Known to occur.</b> This species has been known to nest within Summit Rock of Sanborn County Park since 2008 (Santa Clara Valley Audubon Society 2012). There are documented occurrences (however, specific locations are suppressed) of this species within the Mindego Hill and Castle Rock Ridge U.S. Geological Survey 7.5-minute quadrangles, in which the Project site occurs (CDFW 2022a). Suitable nesting and foraging habitat for this species is present within the Project site.
<i>Progne subis</i> (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats, including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	<b>Low potential to nest and forage.</b> Although the Project site contains suitable riparian and woodland habitat for this species, the site is out of the typical range for this species (Sacramento region), and occurrences in the Bay Area/Peninsula are not common. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<i>Rallus obsoletus obsoletus</i>	Ridgway's rail	FE/FP, SE	Coastal salt or brackish marshes.	<b>Not expected to nest or forage.</b> Coastal salt or brackish marshes are absent from the Project site.
<i>Sternula antillarum browni</i> (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats.	<b>Not expected to nest or forage.</b> Shallow estuary and sandy beach habitat is absent from the Project site.
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	<b>Low potential to nest and forage.</b> Although the Project site contains some suitable riparian vegetation for this species, the vegetation is largely woodland with little to no areas with dense riparian thickets, as required by this species. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<b>Fishes</b>				
<i>Eucyclogobius newberryi</i>	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River.	<b>Not expected to occur.</b> The Project site lacks brackish water habitat as required for this species.
<i>Hypomesus transpacificus</i>	Delta smelt	FT/SE	Sacramento-San Joaquin Delta; seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay.	<b>Not expected to occur.</b> The Project site lacks suitable aquatic habitat for this species.
<i>Oncorhynchus kisutch</i> pop. 4	coho salmon – central California coast ESU	FE/SE	Streams and small freshwater tributaries during first half of life cycle, and estuarine and marine waters of the Pacific Ocean during the second half of life cycle. Spawns in small streams with stable gravel substrates.	<b>Not expected to occur.</b> The Project site lacks suitable aquatic habitat for this species.
<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead – central California coast DPS	FT/None	Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead.	<b>Not expected to occur.</b> The Project sites lack suitable aquatic habitat for this species.
<b>Invertebrates</b>				
<i>Danaus plexippus</i> pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources.	<b>Not expected to occur.</b> The Project site lacks protected groves with nectar and floral sources and nearby water. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<i>Trimerotropis infantilis</i>	Zayante band-winged grasshopper	FE/None	Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem).	<b>Not expected to occur.</b> The Project site lacks sandstone deposit habitat, and the site is outside of the typical range for this species (Zayante Sand Hills Ecosystem).



**Table 4. Special-Status Wildlife Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Bombus crotchii</i>	Crotch bumble bee	None/SCE	Open grassland and scrub habitats with abundant floral resources. Feeds on the nectar of open flowers with short corollas. Nests underground and overwinters in soft, disturbed soil.	<b>Low potential to occur.</b> Although the Project site contains very small fragments of suitable habitat for this species, this habitat is isolated from other suitable habitat areas in the region. The floral resources required for this species were not observed during the reconnaissance-level surveys, and there are no documented occurrences of the species in the vicinity, making the potential for this species to occur low.
<i>Bombus occidentalis occidentalis</i>	western bumble bee	None/SCE	Meadows and grasslands with abundant floral resources. Feeds on the nectar of open flowers with short corollas. Nests in underground cavities, small rodent burrows, and above-ground in logs. Overwinters in soil and leaf litter.	<b>Low potential to occur.</b> Although the Project site contains very small fragments of suitable habitat for this species, this habitat is isolated from other suitable habitat areas in the region. The floral resources required for this species were not observed during the reconnaissance-level surveys, and there are no documented occurrences of the species in the vicinity, making the potential for this species to occur low.
<b>Mammals</b>				
<i>Antrozous pallidus</i>	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in human-made structures and trees.	<b>Moderate potential to occur.</b> Woodland and forest roosting and foraging habitat is available within the Project site, but open grasslands and shrublands are absent. There are several human-made structures and rocky outcrops within the Project site. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<i>Bassariscus astutus</i>	ringtail	None/FP	Mixed forests and shrublands near rocky areas or riparian habitats; forages near water and is seldom found more than 1 kilometer (0.62 miles) from a water source.	<b>Moderate potential to occur.</b> Suitable woodland and mixed forest habitat is present within the Project site, but there are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels.	<b>Moderate potential to occur.</b> Deciduous forest and riparian habitat is available throughout the Project site, but limestones caves and lava tubes for roosting are absent. This species may roost within the human-made structures within the Project site. This species has been documented 2.3 miles southeast of the Sanborn County Park Project site; a 2002 occurrence within the Chapel at Alma College (Occ. No. 600) (CDFW 2022a). This species has also been documented 2.45 miles east of the Upper Stevens Creek County Park Project site; an occurrence from 2000 within a barn (Occ. No. 601) (CDFW 2022a).
<i>Neotoma fuscipes annectens</i>	San Francisco dusky-footed woodrat	None/SSC	Forest habitats with a moderate canopy and moderate to dense understory.	<b>Known to occur.</b> The Project site contains high-quality suitable forest habitat for this species. Woodrat houses were observed throughout the Project site during the 2022 site surveys.
<i>Puma concolor</i>	puma	None/SCT	Scrubs, chaparral, riparian, woodland, and forest; rests in rocky areas and on cliffs and ledges that provide cover; most abundant in riparian areas and brushy stages of most habitats throughout California, except deserts.	<b>High potential to occur.</b> The Project site contains high-quality suitable forest habitat for this species, and the species has been documented as occurring within proximity of the Project site by the general public.
<i>Taxidea taxus</i>	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils.	<b>Not expected to occur.</b> Open grassland, scrub, agricultural and pasture habitat, as required to support this species, is absent from the Project site. Additionally, there are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022a).
<b>Reptiles</b>				
<i>Emys marmorata</i>	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	<b>High potential to occur.</b> The freshwater pond southeast of Defensible Space Fuel Break 04D in Sanborn County Park may provide suitable habitat for this species. Additionally, Lake Ranch within Sanborn County Park provides suitable habitat for this species, with abundant surrounding upland habitat for nesting. This species has historically been documented as occurring within Lake Ranch (CDFW 2022a).
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco garter snake	FE/FP, SE	Wide range of habitats, including grasslands or wetlands adjacent to ponds, marshes, and sloughs.	<b>Moderate potential to occur.</b> The freshwater pond southeast of Defensible Space Fuel Break 04D in Sanborn County Park may provide suitable habitat for this species, but vegetation is not present in continuous patches, the feature is surrounded by paved pedestrian trails, and the location lacks connectivity to other known populations of this species. There are documented occurrences (however, specific locations are suppressed) of this species within



**Table 4. Special-Status Wildlife Species Potential to Occur**

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				the Mindego Hill U.S. Geological Survey 7.5-minute quadrangles in which the Upper Stevens Creek County Park Project site occurs (CDFW 2022a).

**Status Legend**

**Federal**

- BCC: USFWS—Birds of Conservation Concern
- FC: Candidate for federal listing as threatened or endangered
- FE: Federally listed as endangered
- FPD: Federally proposed for delisting
- FPT: Federally proposed for listing as threatened
- FT: Federally listed as threatened

**State**

- FP: CDFW Fully Protected species
- SCE: State candidate for listing as endangered
- SCD: State candidate for delisting
- SCT: State candidate for listing as threatened
- SE: State listed as endangered
- SSC: California Species of Special Concern
- ST: State listed as threatened
- WL: CDFW Watch List species

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

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact GEO-1:</b> Result in Substantial Erosion or Loss of Topsoil	Impact GEO-1, pp. 3.7-26 -3.7-29	SPR AD-3 SPR GEO-1 through SPR GEO-8 SPR HYD-3 SPR HYD-4 SPR AQ-3 SPR AQ-4	LTS	Yes	SPR AD-3 SPR GEO-1 through SPR GEO-8 SPR HYD-4 SPR AQ-3 SPR AQ-4	LTS	<input checked="" type="checkbox"/>

Initial treatment activities would include mechanical treatment, manual treatment, and prescribed burning. Each of 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. Potential impacts related to soil erosion during implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the type of equipment, extent of vegetation removal, and intensity of prescribed burning proposed are consistent with those analyzed in the PEIR.

Treatment activities could potentially leave loose soil exposed to the erosive forces of rainfall and high winds, which would increase the potential for soil erosion and loss of topsoil. A soils report and steep slopes analysis were completed for the project (see Attachment E and Figures 5-1 through 5-3). SCC Parks would implement SPRs to control erosion and sediment during treatment activities. SPRs applicable to this treatment project are SPRs AD-3, GEO-1 through GEO-8, HYD-4, AQ-3, and AQ-4. SPR GEO-1 requires suspension of mechanical soil disturbance during precipitation, SPR GEO-2 limits high ground pressure vehicles, SPR GEO-3 requires stabilization of mechanically disturbed soil areas, SPR GEO-4 requires inspection prior to the rainy season and immediately following the first large rainfall event, SPR GEO-5 requires draining runoff via stormwater breaks, SPR GEO-6 limits burn pile size, SPR GEO-7 limits the use of mechanical equipment on steep slopes, SPR GEO-8 requires an RPF or geologist to inspect steep slopes, SPR AQ-3 requires preparation of a burn plan, and SPR AQ-4 requires measures to minimize dust created on unpaved surfaces. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial erosion or loss of topsoil, especially in areas of steep slopes or erodible soils. Based on the soils report (Attachment E), the main soil types in the project area include Ben Lomond-Casrock complex, Ben Lomond-gravelly sandy complex, Madonna loam, and Casrock-Skyridge-Rock outcrop. The majority of the treatment areas have been designed to avoid steep

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

slopes, as shown in Figures 5-1 through 5-3. Based on the slopes analysis presented in Figures 5-1 through 5-3, treatment areas with slopes exceeding 50% are primarily located in the southern portion of Sanborn Park (Treatment Areas 01F, 01G, 06B, 09, 10, 11, 12, and 13) and along portions of Skyline Boulevard (Treatment Areas 01A, 01C, 01D, 01F). Prior to implementing treatment activities in areas with slopes greater than 50%, treatment areas would be evaluated by a Registered Professional Forester (RPF) or licensed geologist to evaluate for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard) (SPR GEO-8). 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. Areas with slopes greater than 65% would include manual treatments only, and areas with slopes greater than 50% identified as having a high or extreme erosion hazard rating would include manual treatments only, in accordance with SPR GEO-7. A chipper may be used in conjunction with manual treatments on slopes greater than 50%. However, if a chipper is used it would be staged outside of the steep slope areas and crews would manually move vegetation material to the chipper or stacked into piles for pile burning. Additionally, treatment activities would be conducted such that root systems would be left in place and minimal uprooting resulting in soil disturbance would occur, to the extent feasible.

As discussed in the Forest Health Plan, the LiDAR review of the two ecological restoration projects, Lyndon Canyon Creek Wildfire Resiliency Project (Treatment Area 11) and Lake Ranch Wildfire Resiliency Project (Treatment Area 09), there is evidence of unstable areas and landslides. Operations would be restricted and avoid these areas due to the erosion hazard.

Prescribed burning activities also have the potential to result in soil conditions such that increased erosion of loss of topsoil could occur. Per SPR AQ-3, a Burn Plan would be developed prior to conducting any prescribed burning to minimize soil burn severity and the potential for runoff or erosion.

While no non-shaded fuel breaks or bare linear features are proposed, SPR GEO-5 would be implemented to ensure proper drainage from the existing roads adjacent to proposed treatments. The project would not include prescribed herbivory; SPR HYD-3 does not apply to the project.

With implementation of the above mentioned SPRs, it is not anticipated that the proposed project would result in substantial soil erosion or significant losses in topsoil. Impacts on soil erosion or the loss of topsoil would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact GEO-2: Increase Risk of Landslide	Impact Geo-2, pp. 3.7-29 - 3.7-30	SPR GEO-3 SPR GEO-4 SPR GEO-7	LTS	Yes	SPR GEO-3 SPR GEO-4 SPR GEO-7	LTS	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
		SPR GEO-8 SPR AQ-3			SPR GEO-8 SPR AQ-3		

LiDAR for the Forest Health Plan found evidence of unstable soils and landslides within the Lake Ranch Revisor and Lyndon Canyon Creek Wildfire Resiliency Projects. The U.S. Landslide Inventory also indicates the project is in an area with a history of landslides (USGS 2022). Future heavy precipitation events or use of heavy machinery could impact unstable soils and landslide areas. Areas that were identified by LiDAR as having unstable soils and landslides will be avoided and designated as a No Work zone to avoid further soil disturbance, and surrounding treatments would consist of manual treatments only.

The potential for vegetation removal to affect slope stability and increase the risk of landslide was examined in the PEIR. SPRs GEO-3, GEO-4, GEO-7, and GEO-8 would be implemented to reduce the likelihood of erosion and risk of landslides. SPR GEO-3 which requires stabilization of mechanically disturbed soil, SPR GEO-4 requires erosion inspections, SPR AQ-3 minimizes soil burn severity resulting in some vegetation remaining which retains root structures, SPR GEO-7 minimizes erosion by prohibiting mechanical treatment on steep slopes, and SPR GEO-8 requires that a RPF or licensed geologist to evaluate treatment areas with slopes greater than 50% for unstable areas. SPR AQ-3 requires preparation of a Burn Plan prior to conducting any prescribed burning to minimize soil burn severity and the potential for runoff or erosion. Potential impacts related to landslides during implementation of the treatments are within the scope of the activities and impacts addressed in the PEIR because the extent of vegetation removal, intensity of prescribed burning, and avoidance of steep slopes and areas of instability are consistent with those analyzed in the PEIR. SPRs applicable to this treatment (SPRs GEO-3, GEO-4, GEO-7, SPR GEO-8, and AQ-3) would reduce the likelihood of landslides occurring as a result of proposed activities and impacts would be less than significant.

<b>Other Impacts to Geology, Soils, Paleontology, And Mineral Resources:</b> Would the project result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	N/A	N/A	N/A	<input checked="" type="checkbox"/>
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The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR. The project proponent has also determined that the inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

project area, the existing environmental and regulatory conditions pertinent to geology, soils, paleontology, and mineral 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 consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape would not give rise to any new significant impacts not addressed in the PEIR. Therefore, no new impacts related to geology, soils, paleontology, or mineral resources would occur that are not covered in the PEIR.

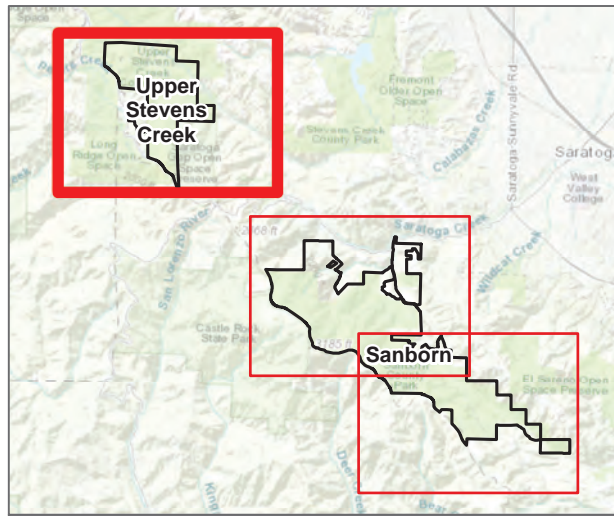
	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR GEO-1 Suspend Disturbance during Heavy Precipitation:</b> The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a “chance” (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	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR GEO-2 Limit High Ground Pressure Vehicles:</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR GEO-3 Stabilize Disturbed Soil Areas:</b> 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	Yes	<u>SCC Parks</u> During-Post	<u>SCC Parks</u>



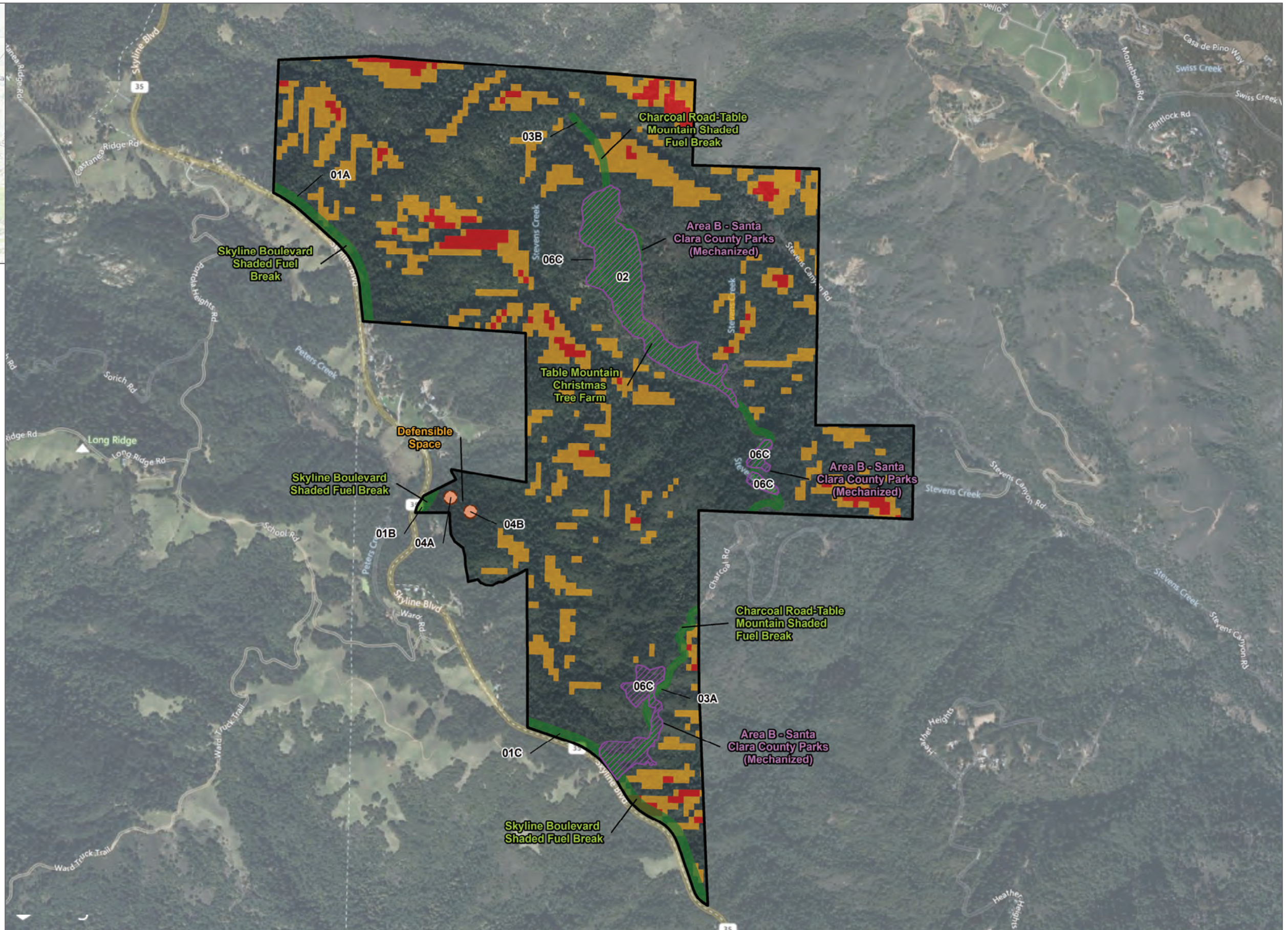
	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
discharge. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.			
<b>SPR GEO-4 Erosion Monitoring:</b> The project proponent will inspect treatment areas 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	<u>SCC Parks</u> During-Post	<u>SCC Parks</u>
<b>SPR GEO-5 Drain Stormwater via Water Breaks:</b> 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© of the California Forest Practice Rules. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR GEO-6 Minimize Burn Pile Size:</b> 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.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR GEO-7 Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads.</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>SCC Parks</u> Prior-During	<u>SCC Parks</u>
<b>SPR GEO-8 Steep Slopes:</b> 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, including treatment maintenance.	Yes	<u>SCC Parks</u> Prior	<u>SCC Parks</u>

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- Park Boundary
- Slope %**
- 50 - 64%
- >65%
- Grant Projects**
- Fuels Reduction
- Recommended Projects**
- Fuel Break - Defensible Space (Mechanical / Manual)
- Fuel Break - Shaded Fuel Break (Mechanical / Manual)



SOURCE: Bing Maps 2021, Santa Clara County 2022

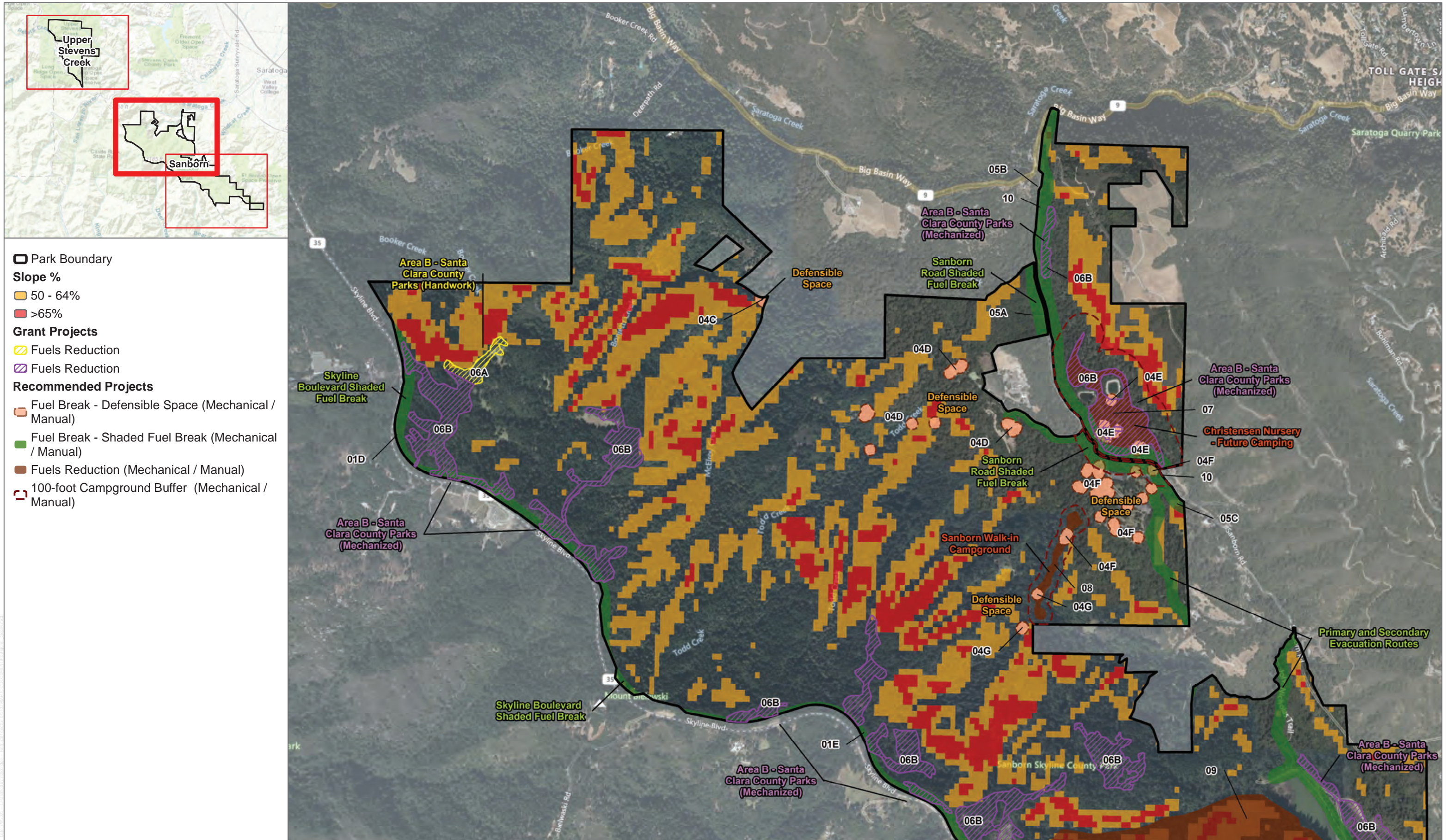


FIGURE 5-1  
Slopes



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SOURCE: Bing Maps 2021, Santa Clara County 2022

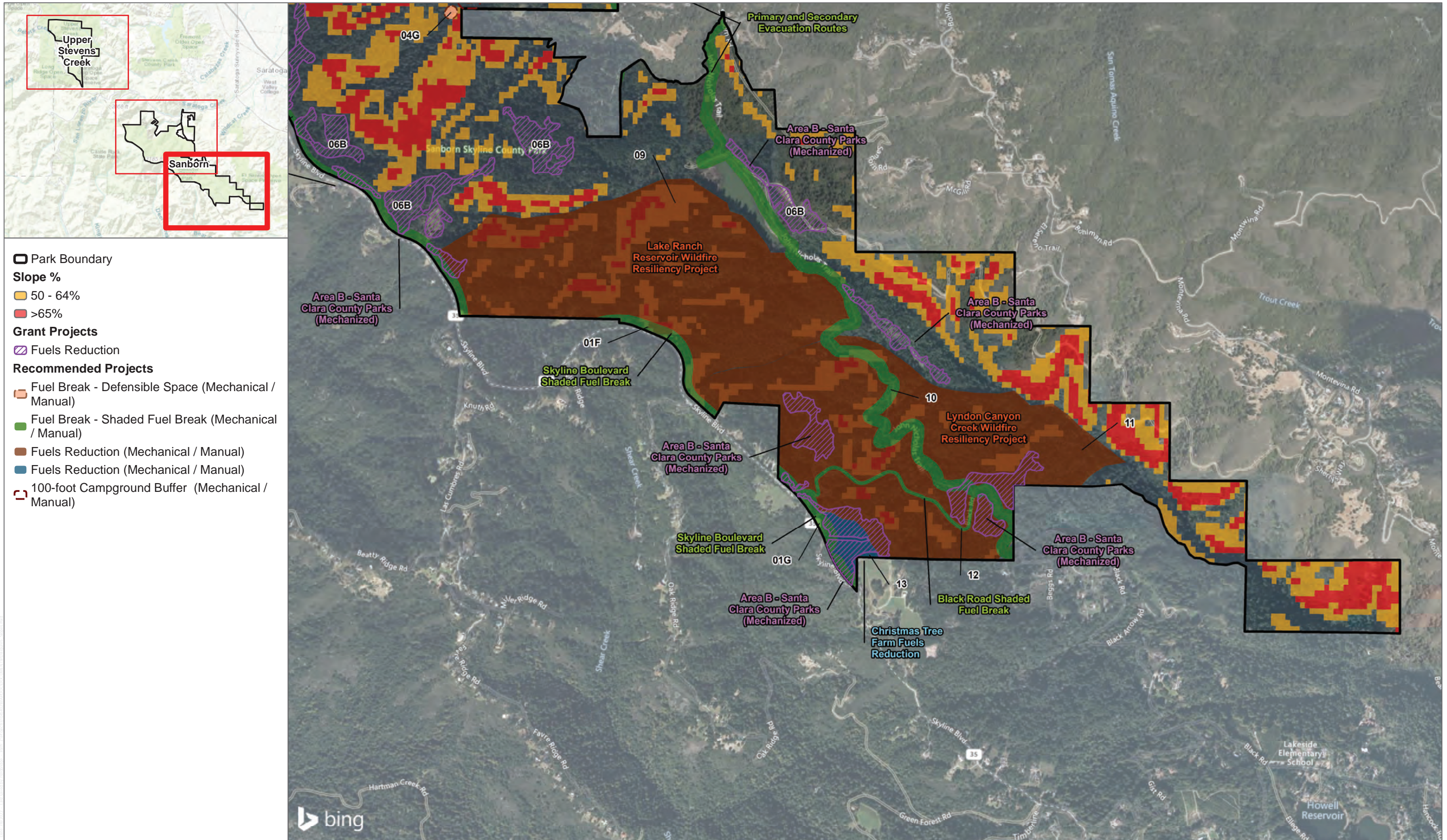


FIGURE 5-2  
Slopes



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SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 5-3  
Slopes



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### 3.7 Greenhouse Gas Emissions

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact GHG-1:</b> Conflict with the applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs	Impact GHG-1, pp. 3.8-10-3.8-11	SPR GHG-1	LTS	Yes	N/A	LTS	No <input checked="" type="checkbox"/>

The use of vehicles, mechanical equipment, and prescribed pile burning would result in greenhouse gas (GHG) emissions. Consistency with plans, policies and regulations governing GHG emissions was examined in the PEIR. The project would be consistent with the applicable policies, plans, and regulations to reduce GHG emissions as described in California’s 2017 Climate Change Scoping Plan (CARB 2017), the California Forest Carbon Plan (Forest Climate Action Team 2018), and the Draft California 2030 (CARB 2019). It would also be consistent with local policies, plans, and regulations regarding GHG emission reduction in Santa Clara County’s Sustainability Master Plan (Santa Clara County 2021). The project would be implemented so as to not be in conflict with application plans, policies, and/or regulations and the impact would be less than significant.

SPR GHG-1 is not applicable to the proposed project; SCC Parks Department is not subject to providing information to inform reporting under the Board of Forestry and Fire Protection’s Assembly Bill 1504 Carbon Inventory Process because this project is not a registered offset project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

<b>Impact GHG-2:</b> Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, p. 3.8-11-3.8-17	SPR AQ-3 MM GHG-2	PSU	Yes	SPR AQ-3 MM GHG-2	PSU	<input checked="" type="checkbox"/>
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The intent of vegetation treatments is to reduce wildfire risk, which would reduce GHG emissions related to wildfires. The project would result in the generation of GHG emissions from treatment activities through the use of vehicles, mechanical equipment, and prescribed burning. Prescribed burning would produce the most GHG emissions, as the combustion of vegetation produces smoke, which contains carbon dioxide and methane. The project proponent would document and implement GHG reduction techniques to reduce GHG emissions associated with prescribed burning per SPR AQ-3 (which requires preparation of a Burn Plan) and MM GHG-2 (which describes methods for reducing GHG emissions and requires that the project proponent document methods were used to reduce GHG emissions in the Burn Plan). However, though mitigation actions would be implemented to reduce GHG emissions, the treatments would still contribute to the annual emissions generated by the CalVTP and would remain potentially significant and unavoidable. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Other Impacts to related to Greenhouse Gases:</b> Would the project result in other impacts related to greenhouse gases that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>

The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR Section 3.8. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to GHG emissions would occur.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process:</b> The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>MM GHG-2 Implement GHG Emission Reduction Techniques During Prescribed Burns.</b> 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.	Yes	<u>SCC Parks</u> Prior-During	<u>SCC Parks</u>

### 3.8 Energy Resources

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact ENG-1:</b> Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	Impact ENG-1, pp. 3.9-7-3.9-8	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>

The project would require the consumption of energy through the use of fossil fuels associated with the use of vehicles, mechanical equipment, including handheld equipment (e.g., e.g., chain saws, masticators, feller-bunchers, skidders, grinders); and trucks (e.g., water trucks, fire engine, off-road equipment/vehicles). Diesel and petroleum-based fuels, such as gasoline, would be consumed from the use of heavy-duty equipment and trucks, mechanical equipment, and the transport of personnel and equipment to and from and within the project site. The primary objectives of the project are to reduce wildfire risk, improve forest health, and decrease the intensity of fires. Wildfire response requires an immediate response from emergency personnel and mobilization of equipment from across the state and even across the nation, which often results in inefficient consumption of energy. Implementation of treatment activities would reduce wildfire risk and therefore would reduce the potential for inefficient consumption of energy from emergency response to wildfire. There are no SPRs applicable to this impact and the impact would be less than significant, consistent with the PEIR.

<b>Other Impacts to Energy Resources:</b> Would the project result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR Section 3.9. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR.



### 3.9 Hazardous Materials, Public Health, and Safety

	PEIR Specific			Project Specific			
	Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact HAZ-1:</b> Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, pp. 3.10-14-3.10-15	SPR HAZ-1 SPR HYD-4	LTS	Yes	SPR HAZ-1 SPR HYD-4	LTS	<input checked="" type="checkbox"/>

The proposed project would include mechanical treatments, manual treatments, and prescribed burning in order to implement WUI fuel reduction, shaded fuel breaks, and ecological restoration projects. Treatment activities and transportation of equipment would require the use of hazardous materials, including fuels, oils, and lubricants, as well as accelerants for prescribed burns. Potential impacts related to use of such materials during treatment activities are within the scope of the activities and impacts addressed in 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. SPR HAZ-1 is applicable to the project and requires that all equipment would be properly maintained and regularly inspected for leaks. Additionally, the project proponent would ensure that the transport and use of hazardous materials would be conducted in compliance with existing federal, state, and local regulations governing hazardous material use, storage, disposal, and transport to prevent project-related risks to public health and safety.

Additionally, project treatment activities would not be conducted within protection zones for watercourses (SPR HYD-4). Watercourses and potential drainages leading to watercourses have been identified during field surveys and identified on project maps (further discussed in Section 3.10, Hydrology and Water Quality). Therefore, it is not anticipated that the proposed project would result in a significant health hazard from the use of hazardous materials and impacts would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

<b>Impact HAZ-2:</b> Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, pp. 3.10-16-3.10-18	SPR HAZ-5 through SPR HAZ-9	LTS	Yes	SPR HAZ-5 through SPR HAZ-9	LTS	<input checked="" type="checkbox"/>
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The application of herbicides may be used on its own or as a secondary vegetation treatment technique following hand labor or mechanical treatments. Herbicide use would be implemented in accordance with BMPs outlined in Section 2 of this PSA and the Forest Health Plan. Herbicide use would be limited to localized applications rather than foliar applications to eliminate the possibility of drift to neighboring desirable vegetation or off site. Herbicides would be applied in accordance with state and federal law. A cut and daub application technique would be used for larger invasive plants (e.g., blue gum eucalyptus) to control regrowth and kill the portion of the plant remaining below ground, and involves the direct application of an appropriate systemic herbicide directly to the cambium layer of the freshly cut stump. Cutting broom should be conducted in the spring months, prior to

PEIR Specific		Project Specific					
Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact	

seed set. Re-sprouts from cutting are common, so herbicide treatment following cutting may be necessary. All use of herbicide would be coordinated in accordance with the County’s IPM Policy. Prescribed burning of uncut broom may also be an effective treatment if conducted in late spring or early summer.

Per the CalVTP, herbicide treatments would be limited to ground-based application and must comply with all Environmental Protection Agency (EPA) label directions. According to the PEIR Table 3.10-1, the herbicides proposed under the CalVTP pose low levels of toxicity to humans (CalVTP Final PEIR Volume II Section 3.10.3 Table 3.10-1, page 16-17). In addition, the proposed project treatments will comply with SPR HAZ-5 through HAZ-9, which require the following: a Spill Prevention and Response Plan will be prepared prior to any herbicide treatment activities (SPR HAZ-5), compliance to herbicide application regulations including permitting and licensing through the Santa Clara County Agricultural Commissioner’s office prior to herbicide application (SPR HAZ-6), triple rinse herbicide containers and dispose of rinsed materials at an approved site (SPR HAZ-7), minimize herbicide drift into public areas through application parameters such as limitations for nozzle pressure and nozzle distance from vegetation (SPR HAZ-8), and notification of herbicide within 500 feet of public areas including posting signs on either side of herbicide treatment areas (SPR HAZ-9). Based on compliance to regulatory requirements and SPRs in addition to utilizing low-level toxicity herbicides proposed under the PEIR, the potential for this project to result in significant health hazard from the use of herbicides is less than significant.

<b>Impact HAZ-3:</b> Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, pp. 3.10-18–3.10-19	MM HAZ-3	PS	Yes	MM HAZ-3	LTSM	<input checked="" type="checkbox"/>
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The project site is located on public property and the public has access to areas adjacent to the treatment areas. The proposed project treatments would include manual, mechanical, and prescribed burning, which would result in soil disturbance and could expose workers or the environment to hazards from a hazardous materials site, if present within the project area. The potential for the proposed treatment activities to encounter contamination that could expose workers 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 or burning in those areas could expose people or the environment to hazards.

Due to the availability of public access to the treatment areas, MM HAZ-3 is applicable to the project. Per MM HAZ-3, searches of the California Department of Toxic Substances Control’s EnviroStor and the State Water Resources Control Board’s GeoTracker online databases were conducted. These databases contain information regarding the location and status of hazardous materials sites included on the Cortese List (Government Code Section 65962.5). A review of EnviroStor databases showed that the project site does not contain any known hazardous materials sites and the nearest

	PEIR Specific			Project Specific			
	Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

known hazardous materials site is 0.5 miles east of the proposed treatment areas (DTSC 2022). Due to distance, off-site contamination is not likely to pose a risk to workers within the treatment areas. However, the GeoTracker database indicated that there were three known Leaking Underground Storage Tanks (LUST) clean-up sites near the County Parks (SWRCB 2022). Two of the sites are located south of CA-9 near the Saratoga Gap Open Space Reserve. The third site is located south of CA-9 between the California Survival School and Sanborn Road. All three LUST clean-up sites are closed cases and located outside of the proposed treatment areas. Further, the project would result in limited ground disturbance and would be unlikely to pose a risk to workers related to disturbance of hazardous materials sites. Therefore, the impact is less than significant and consistent with the PEIR.

<b>Other Impacts to Hazardous Materials, Public Health and Safety:</b> Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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The project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting examined in Section 3.10 of the PEIR. The use of hazardous materials and proximity to known hazardous material sites would be the same for project areas inside and outside the CalVTP treatable landscape. Therefore, the project would not result in other impacts related to hazards and hazardous materials not addressed in the PEIR. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR HAZ-1 Maintain All Equipment:</b> 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	<u>SCC Parks</u> Prior-During	<u>SCC Parks</u>



	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR HAZ-2 Require Spark Arrestors:</b> This SPR applies only to manual treatment activities and all treatment types	Yes	SCC Parks During	SCC Parks
<b>SPR HAZ-3 Require Fire Extinguishers:</b> 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	SCC Parks During	SCC Parks
<b>SPR HAZ-4 Prohibit Smoking in Vegetated Areas.</b> This SPR applies to all treatment activities and treatment types.	Yes	SCC Parks During	SCC Parks
<b>SPR HAZ-5 Spill Prevention and Response Plan:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	SCC Parks Prior-During	SCC Parks
<b>SPR HAZ-6: Comply with Herbicide Application Regulations.</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	SCC Parks During	SCC Parks
<b>SPR HAZ-7 Triple Rinse Herbicide Containers:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	SCC Parks During	SCC Parks
<b>SPR HAZ-8 Minimize Herbicide Drift into Public Areas:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	SCC Parks During	SCC Parks
<b>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas.</b> 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. <i>This</i> SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	SCC Parks Prior-During	SCC Parks
<b>MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites</b> 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	Yes	SCC Parks Prior	SCC Parks

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
determine if there are any sites known to have previously used, stored, or disposed of hazardous materials.			

### 3.10 Hydrology and Water Quality

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact HYD-1:</b> 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, pp. 3.11-25-3.11-27	SPR AQ-3 SPR HYD-4 SPR BIO-4 SPR BIO-5 SPR GEO-4 SPR GEO-6 MM BIO-3b	LTS	Yes	SPR AQ-3 SPR HYD-4 SPR HYD-6 SPR GEO-4 6	LTS	<input checked="" type="checkbox"/>

The project area is located in the Permanente, San Thomas, and Guadalupe River watersheds, and there are several significant hydrologic features and sub-watersheds located in the project vicinity, including Stevens Creek, Sanborn Creek, Saratoga Creek, Los Gatos Creek, Stevens Reservoir, Lexington Watershed, and Lake Ranch Reservoir (Valley Water 2021).

The two main creeks within Sanborn County Park are Sanborn Creek and Lyndon Canyon Creek. Sanborn Creek flows northwest through the Park and flows into Saratoga Creek north of the Park. Aubry Creek, a tributary to Sanborn Creek runs along the western edges of the Sanborn Core Use Area and Former Nursery Area. Todd Creek runs along the western edge of the Welch-Hurst Area before joining Bonjetti Creek and then Sanborn Creek. Lyndon Canyon Creek has its headwaters within the Park and flows southeast from Lake Ranch Reservoir towards Lexington Reservoir (Santa Clara County Parks 2019). Stevens Creek and multiple branches and tributaries of Stevens Creek make up the main hydrologic environment within Upper Stevens Creek County Park (CDFW 2017).

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

The climate in the project area consists of typically mild and dry summers followed by cool and wet winters. Intermittent drainages exist throughout the project site that capture rainfall in winter and spring but are dry in the summer months. These drainages could eventually reach nearby surface waters or groundwater. The project is within the Santa Clara groundwater basin (Valley Water 2017).

The proposed project would include manual and mechanical treatments and prescribed burning. Although pile burning would result in localized high-severity burn conditions, pile sites would be limited in size (per SPR GEO-6) and dispersed throughout the landscape, which would reduce hydrologic connectivity. A burn plan would be developed prior to any prescribed broadcast burns (SPR AQ-3) and soil burn severity would be minimized to reduce the potential for runoff and soil erosion. Additionally, SPR HYD-4, which prohibits the placement of burn piles within WLPZs, would be implemented as part of project design. WLPZs ranging from 50 to 150 feet would be implemented for any watercourses that are within treatment areas pursuant to SPR HYD-4. Potential impacts to water quality of off-site waterways during implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the proposed treatment activities and associated impacts to water quality are consistent with those analyzed in the PEIR. SPRs applicable to this treatment include SPRs AQ-3, HYD-4, HYD-6, GEO-4, and GEO-6.

These SPRs would reduce the potential for prescribed burning activities to impact water quality and would preserve streamside buffers to capture runoff from treatment areas. Additionally, SPR GEO-4 requires implementation of erosion controls prior to the next rainy season and inspection for evidence of erosion after the first large storm or rainfall event. Any areas of erosion that would result in substantial sediment discharge would be remediated. As such, impacts would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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, pp. 3.11-27 – 3.11-29	SPR HYD-1 SPR HYD-4 SPR HYD-5 SPR BIO-1 SPR GEO-1 through SPR GEO- 1, 2, 3, 4, 7, 8 SPR HAZ-1 SPR HAZ-5	LTS	Yes	SPR HYD-1 SPR HYD-4 SPR HYD-5 SPR BIO- 1 SPR GEO-1 through SPR GEO-7 SPR HAZ-1	LTS	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

The proposed project includes manual and mechanical treatment activities and prescribed pile burning. Within the project vicinity there are several significant hydrologic features including Stevens Creek, Sanborn Creek, Saratoga Creek, Stevens Reservoir, and Lake Ranch Reservoir (Valley Water 2021). The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR. Per SPR HYD-4, WLPZs ranging from 50 to 150 feet would be established for any watercourses or drainages that could lead to surface waters or groundwater. WLPZs have been identified during field surveys conducted in accordance with SPR BIO-1. Additionally, the project would be implemented in compliance with all state and regional water quality regulations, including waste discharge requirements (WDRs) per the San Francisco Bay Regional Water Quality Control Board (SPR HYD-1). Per SPR HYD-1, the San Francisco Bay RWQCB does not offer WDRs or Conditional Waivers of Waste Discharge Requirements for fuel reduction or vegetation management activities. The project proponent may use the State Water Board’s Vegetation Treatment General Order. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water Board’s Vegetation Treatment General Order, which pertains to projects that prepare a CalVTP PSA or PSA/Addendum. The project’s automatic enrollment satisfies the requirements of SPR HYD-1 (SWRCB 2021).

The project would limit ground disturbance during and after precipitation (SPR GEO-1 and SPR GEO-2) and treatment areas would be inspected for erosion and remediated prior to the rainy season and following the first large storm or rainfall event (SPR GEO-4). Equipment operation would be limited to slopes less than 65%, and treatment areas with slopes greater than 50% would be inspected by a RFP or licensed geologist to determine erosion hazard prior to implementing treatments (SPR GEO-7) to reduce the potential for erosion. Additionally, if needed, highly disturbed areas would be stabilized with mulch (SPR GEO-3). The project does not include the construction of new roads (SPR HYD-2). Although no linear or bare (non-shaded fuel breaks) treatments are proposed, SPR GEO-5 would be implemented to minimize erosion. Additionally, per SPR HAZ-1, all equipment would be maintained to ensure there are no leaks or spills that could impact water quality.

SPRs applicable to this treatment are SPRs HYD-1, HYD-4, HYD-5, GEO-1 through GEO-5, GEO-7, BIO-1, and HAZ-1. With implementation of these SPRs, impacts to water quality would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

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, pp. 3.11-29	SPR HYD-3	LTS	No	N/A	N/A	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

This impact does not apply to the proposed project because the project would include manual, mechanical, and prescribed burning; the use of prescribed herbivory is not proposed as part of the project. Therefore, SPR HYD-3 is not applicable to the project.

<b>Impact HYD-4:</b> 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, pp. 3.11-30-3.11-31	SPR HYD-5 SPR BIO-4 SPR HAZ-5 SPR HAZ-7	LTS	Yes	SPR HYD-5 SPR BIO-4 SPR HAZ-5 SPR HAZ-7	LTS	<input checked="" type="checkbox"/>
<b>Impact HYD-5:</b> Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	Impact HYD-5, pp. 3.11-31	SPR HYD-4 SPR HYD-6 SPR GEO-5	LTS	Yes	SPR HYD-4 SPR HYD-6 SPR GEO-5	LTS	<input checked="" type="checkbox"/>

Proposed treatments would include mechanical treatment, manual treatment, and prescribed burning, which would cause ground disturbance and could alter drainage patterns. However, as described in the PEIR, these activities would have minor impacts to on-site drainage with implementation of SPRs. The potential for treatment activities to substantially alter the existing drainage pattern of a project site was examined in the PEIR. Potential impacts to site drainage during implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the types of treatments and treatment intensity of treatments are consistent with those analyzed in the PEIR.

The use of heavy machinery would have the greatest potential to impact site drainage. However, heavy equipment would be limited to the existing to areas with slopes that are less than 65% and would be supported by manual treatments. Areas with slopes greater than 50% would be inspected by a RFP or licensed geologist prior to implementing treatments (SPR GEO-7), and appropriate measures would be applied, such as limiting treatment activities to manual treatments or establishing No Work zones. Limiting ground disturbance would reduce potential impacts on site drainage. Although no non-shaded fuel breaks or bare linear treatments are proposed, SPR GEO-5 would be implemented along the existing road during road maintenance activities. Additionally, SPRs HYD-4 and HYD-6 would be implemented, which would ensure that WLPZs are established and existing drainage systems are not impacted. The project would result in less than significant impacts to site drainage, which would be consistent with the PEIR and would not result in a substantially more severe impact than was covered in the PEIR.

<b>Other Impacts to Hydrology and Water Quality:</b> Would the project result in other impacts to	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
hydrology and water quality that are not evaluated in the CalVTP PEIR?							

The project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting examined in Section 3.11 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions, including proximity to surface waters, groundwater, and existing drainage, of the project areas outside the treatable landscape and within the treatable landscape are essentially the same. Therefore, the project would not result in other impacts related to hydrology and water quality not addressed in the PEIR. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR HYD-1 Comply with Water Quality Regulations:</b> 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	SCC Parks Prior-During	SCC Parks
<b>SPR HYD-2 Avoid Construction of New Roads:</b> 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	SCC Parks Prior-During	SCC Parks
<b>SPR HYD-3 Water Quality Protections for Prescribed Herbivory.</b> This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.	No	N/A	N/A

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>PR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:</b> 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	SCC Parks Prior	SCC Parks
<b>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides.</b> This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	SCC Parks During	N/A
<b>SPR HYD-6 Protect Existing Drainage Systems:</b> This SPR applies to all treatment activities and treatment types.	Yes	SCC Parks Prior-During	SCC Parks

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

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact LU-1:</b> Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	Impact LU-1, pp. 3.12-13-3.12-14	SPR AD-3 SPR AD-9	LTS	Yes	SPR AD-3	LTS	<input checked="" type="checkbox"/>

The treatments would occur on public property within a County Park. As a local agency, SCC Parks is required to comply with local plans, policies, and regulations. SPR AD-3 would be implemented, which would ensure that the project does not conflict with land use plans, policies, and regulations. Treatments would be designed and take place in a manner that is consistent with applicable plans, policies, and regulations outlined in the Santa Clara County General Plan (Santa Clara County 1994), the SCC Land Use & Development Code (Santa Clara County 2022b), the Upper Stevens Creek County Park Master Plan (Santa Clara County Parks 1993), the Sanborn County Park Master Plan (Santa Clara County Parks 2019) the Santa Clara Unit 2021 Strategic Fire Plan (CAL FIRE et al. 2021). As discussed in Section 3.2, Agriculture and Forestry Resources, and Section 3.5, Biological Resources,



	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

treatment activities would be implemented consistent with local plans and regulations. Additionally, as discussed in Section 3.12, Noise, treatment activities would take place during daytime hours, consistent with the County Noise Ordinance.

The potential for vegetation treatment to cause a significant impact on land use planning, policy, and regulation was examined in the PEIR. The project would not result in a substantially more significant impact than that covered in the PEIR; impacts would be less than significant.

Santa Clara County does not contain any coastline and the project area is not within the Coastal Zone. Therefore, the project is exempt from acquiring a Coastal Development Permit under the Coast Act. SPR AD-9 does not apply to the treatment project.

<b>Impact LU-2:</b> Induce Substantial Unplanned Population Growth	Impact LU-2, pp. 3.12-14-3.12-15	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
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The potential for implementation of treatment projects to result in population growth was analyzed in the PEIR. The project would require 12 to 24 person crews to implement proposed treatments. The project would require a short-term increase in demand for workers. However, it is anticipated that workers implementing the proposed treatment project would primarily consist of existing SCC Park employees, CAL FIRE employees, local Fire Agencies or contractors, and the project would not require the hiring of new permanent employees. Additionally, the number of workers required for the implementation of treatment activities is consistent with crew sizes analyzed in the PEIR. Therefore, the resulting impact to population and housing is the same and would not result in a substantially more significant impact than covered in the PEIR. There are no SPRs applicable to this impact.

<b>Other Impacts related to Land Use and Planning, Population and Housing:</b> 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?		N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in CalVTP PEIR Section 3.12. No new impact related to land use and planning, population, and housing would occur.

### 3.12 Noise

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact NOI-1:</b> Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	Impact NOI-1, pp. 3.13-9-3.13-12; Appendix NOI-1	SPR NOI-1 through SPR NOI-6 SPR AD-3	LTS	Yes	SPR NOI-1 through SPR NOI-6 SPR AD-3	LTS	<input checked="" type="checkbox"/>
<p>The proposed treatments would require heavy noise-generating equipment. Santa Clara County identifies noise restrictions for construction activities, and these would also apply to the vegetation treatments. The Santa Clara County Code Section B11-154 prohibits the production of construction noise Monday through Saturday from 7:00 p.m. to 7:00 a.m. or anytime on Sunday (Santa Clara County 2022c). The Upper Stevens Creek County Park does not contain any schools, hospitals, or residences within 1,500 feet of treatment areas. However, the Sanborn County Park contains campgrounds and two staff residences that would be located within 1,500 feet of treatment areas. SPRs AD-3 and NOI-1, NOI-2, NOI-3, NOI-4, NOI-5, and NOI-6 would be implemented to limit the potential impact on ambient noise levels. The impact would be less than significant, and the project would not result in a more significant impact than covered in the PEIR.</p>							
<b>Impact NOI-2:</b> Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	Impact NOI-2, pp. 3.13-12	SPR NOI-1	LTS	Yes	SPR NOI-1	LTS	<input checked="" type="checkbox"/>
<p>The project would require the use of large trucks to haul heavy equipment to the project site. The trucks would use State Highway 9, State Highway 35 before reaching park roads that would be used for site access. While trucks would pass residential sensitive receptors, it is not anticipated that project traffic would result in a substantial increase in truck-generated noise along these roads. Further, the project would use park roads for site access. The event of each truck passing could increase the single event noise levels (SENLs). Consistent with Santa Clara County noise ordinance, SPR NOI-1 would be implemented and equipment hauling trips would be limited to daylight hours, limiting SENL exposure during more noise-sensitive hours such as evening and nighttime. The impact would be less than significant, and the project would not result in a more significant impact than covered in the PEIR.</p>							
<b>Other Impacts Related to Noise:</b> Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

The project is consistent with the CalVTP PEIR and the site-specific characteristics are within the regulatory and environmental setting in Section 3.13. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to noise not addressed in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR NOI-2 Equipment Maintenance:</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR NOI-3 Engine Shroud Closure:</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses.</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>
<b>SPR NOI-5 Restrict Equipment Idle Time:</b> 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	<u>SCC Parks</u> During	<u>SCC Parks</u>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors.</b> 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, including treatment maintenance.	Yes	SCC Parks <u>Prior</u>	SCC Parks

### 3.13 Recreation

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Impact Significance for the Treatment Project	No New Impact
<b>Impact REC-1:</b> Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	Impact REC-1, pp. 3.14-6-3.14-7	SPR REC-1	LTS	Yes	SPR REC-1	LTS	<input checked="" type="checkbox"/>

The proposed treatments would occur within public parks property. Sanborn and Upper Stevens Creek are designated recreation areas and include trails and camping areas that are within and adjacent to treatment areas. Both parks are also within a network of adjacent open space and recreation areas. The goal of the treatments is address wildfire issues that potentially threatening the existing recreational resources (Santa Clara County Parks 1993, 2019; Santa Clara County 1994). The project has the potential to have short-term impacts to recreation areas or temporarily restrict public access to surrounding areas for safety reasons. Potential impacts could be associated with short-term degradation of recreational resources, decreased air quality due to pile burns and mechanical equipment, and traffic. However, each of these disruptions have been addressed in Sections 3.1, Aesthetics and Visual Resources, 3.3, Air Quality, and 3.14, Transportation. Further, the project would implement SPR REC-1 which requires coordination with recreational facilities and notice of temporary closures. As the implementing agency and project proponent, SCC Parks would ensure that all Park staff and visitors are informed of treatment activities. With regulatory compliance, implementation of SPRs include SPR REC-1, and mitigation measures as discussed in the PSA the impact to recreational resources would be less than significant.



	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Impact Significance for the Treatment Project	No New Impact
<b>Other Impacts to Recreation:</b> Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A		<input checked="" type="checkbox"/>

The project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.14 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions of the project areas outside the treatable landscape and within the treatable landscape were determined to be essentially the same as those addressed in the PEIR. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to recreation not addressed in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR REC-1: Notify Recreational Users of Temporary Closures.</b> This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	<u>SCC Parks</u> During	<u>SCC Parks</u>

### 3.14 Transportation

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact TRAN-1:</b> 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, pp. 3.15-9 -3.15-10	SPR TRAN-1 SPR AD-3	LTS	Yes	SPR TRAN-1 SPR AD-3	LTS	<input checked="" type="checkbox"/>

The project would potentially temporarily increase vehicular traffic along Sanborn Road, CA-9, CA-35, North Foothill Boulevard, Stevens Canyon Road, and Skyline Boulevard before reaching internal park access roads for site access. Public roads and County park roads would be primarily used for site access. The increase in traffic would be related to vehicles hauling heavy equipment, materials, and personnel commuting (crews would range from 12 to 24 to the project site). The impact to traffic would be short term and only a limited number of vehicles. No prolonged road closures would result from the project. Further, the treatments would not occur all at once but rather in phases. Therefore, the increase in traffic would be dispersed over the project timeline. As previously discussed, SPR AD-3 is applicable to the project and treatments would be consistent with local policies such as the Santa Clara General Plan Transportation Element and Santa Clara County Municipal Code. SPR TRAN-1 would be implemented, and the project proponent would refer to the California Department of Transportation and Santa Clara County to determine if a Traffic Management Plan is needed and all appropriate permits would be obtained. As a result, the impact to traffic is also the same and is within the scope of the PEIR. The project would not result in a more significant impact than covered in the PEIR. SPRs TRAN-1 and AD-3 apply to this impact.

<b>Impact TRAN-2:</b> Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, pp. 3.15-10-3.15-11	SPR TRAN-1 SPR AD-3	LTS	Yes	SPR TRAN-1 SPR AD-3	LTS	<input checked="" type="checkbox"/>
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The project would utilize existing roads to access the site. There are no new roads proposed nor re-design or alteration of current roadways. Prescribed pile burning is proposed as part of the project, which would create the potential for smoke production to affect visibility along nearby roadways. Burning would take place under favorable conditions and a burn plan would be created prior to minimize smoke production and visibility. During the burn event, the project proponent would monitor the prescribed burn and the associated smoke. SPRs TRAN-1, and AD-3 would be implemented to manage and minimize the potential hazards associated from smoke generated during prescribed burns. As a result, the impact to increased hazards is also the same

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

and within the scope of the PEIR. The project would result in a less than significant impact related to increasing road hazards and would not result in a more significant impact than covered in the PEIR.

<b>Impact TRAN-3:</b> Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, pp. 3.15-11-3.15-13	MM AQ-1	PSU	Yes	N/A	LTS	<input checked="" type="checkbox"/>
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The project would temporarily increase vehicle miles traveled (VMT) above baseline conditions. The project would require multiple trips to access the treatment locations. Vehicular travel associated with the implementation of the treatment actions would primarily be generated by trips to the treatment sites for hauling equipment and personnel. Per the analysis methodologies presented in the PEIR, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact. As presented in the PEIR, this would allow for up to 50 vehicles bringing crews and equipment to the project site in a single day. Because of the small sizes of the crews needed for the proposed project (12-24 crewmembers), and the variability of when treatments would be implemented over a 10-year timeframe, it is unlikely that the total VMT would exceed 110 trips per day. Given that project implementation would be spread out over 10 years the vehicle trips would be dispersed over time and across multiple roadways. As such, impacts related to a potential increase in VMT would be less than significant. MM AQ-1 would not apply to the impact because the impact is less than significant. As a result, the project would result in a less than significant impact and would not result in impacts greater than those covered in the PEIR.

<b>Other Impacts to Transportation:</b> Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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The project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.15. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions of the project areas outside the treatable landscape and within the treatable landscape were determined to be essentially the same as those addressed in the PEIR. The impacts associated with the proposed treatment activities are consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to transportation not addressed in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR TRAN-1 Implement Traffic Control during Treatments:</b> 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	SCC Parks Prior-During	SCC Parks

### 3.15 Public Services, Utilities, and Service Systems

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact UTIL-1:</b> Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	Impact UTL-1, 3.16	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<p>The proposed project would include manual and mechanical treatments and prescribed pile burning. Treatment activities would require an on-site water supply for fire suppression in the event a burn goes out of prescription as well as for dust control. Water would be supplied from well systems at the parks or metered connections to municipal water systems. As discussed in Section 3.11, Land Use and Planning, Population, and Housing, implementation of the project would not include development or induce significant population growth in the area that would increase the demand for water or require additional infrastructure. There are no SPRs applicable to this impact.</p> <p>The project would not result in a substantially more significant impact than that covered in the PEIR, and the impact would be less than significant.</p>							
<b>Impact UTIL-2:</b> Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	SPR UTIL-1	PSU	Yes	SPR UTIL-1	LTS	<input checked="" type="checkbox"/>



	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

The vegetation treatments on the project site would generate biomass as a result of vegetation removal. Biomass would be managed by mastication, chipping, removal to regional composting or biomass processing facilities, as well as burned on site using air curtain burners or pile burning. In some cases, logs may be stored on site temporarily for transport to biomass facilities. For chipping and spreading on site, chips would not exceed an average of 6 inches in depth. Prior to implementation of treatment activities requiring biomass disposal at processing facilities, SPR UTIL-1 would be implemented to confirm processing facilities have capacity to receive project biomass. The potential for biomass to result in solid waste in excess of state standards or local infrastructure capacity was examined in the PEIR, which found a potentially significant and unavoidable impact, because it cannot be guaranteed, that all localities across the state would develop the capacities to process excess solid organic waste produced from treatment activities within the timeframes of the proposed activities. Although biomass quantities requiring disposal at a processing facility are not known at this time, it is anticipated that the project would not produce biomass quantities in exceedance of state standards or local capacities, and alternate disposal techniques would be used (mastication, chipping, composting, or burning) if processing facilities are unable to receive project biomass. As such, impacts would be less than significant.

<b>Impact UTIL-3:</b> Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	Impact UTL-3, 3.16	SPR UTIL-1	LTS	Yes	SPR UTIL-1	LTS	<input checked="" type="checkbox"/>
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As previously discussed, the project would generate biomass as a result of vegetation removal, which would be managed by mastication, chipping, removal to regional composting or biomass processing facilities, as well as burned on site using air curtain burners or pile burning. The PEIR examined this issue and determined that because projects under the CalVTP 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, the amount of waste transported to solid waste facilities would be decreased, consistent with AB 939 and SB 1383. SPR UTIL-1 would be implemented prior to starting treatments that would require off site disposal, which requires the project proponent to prepare a Solid Organic Waste Disposition Plan that identifies the amount of solid organic waste to be transported off site to biomass power plant, wood product processing facility, and/or composting for processing. This SPR also prohibits solid organic waste generated during vegetation treatments from being transported to a landfill for disposal. Therefore, implementation of the CalVTP would contribute to the amount of organic waste diverted from solid waste facilities consistent with AB 939 and SB 1383 and would be consistent with solid waste reduction goals. Therefore, the impact would be less than significant.

<b>Other Impacts to Public Services, Utilities, and Service Systems:</b> Would the project result in other impacts to public services,	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
utilities, and service systems that are not evaluated in the CalVTP PEIR?							

The project is consistent with the CalVTP, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.16. The impacts associated with the proposed project were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to public services, utilities, and service systems that were not addressed in the PEIR.

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR UTIL-1 Solid Organic Waste Disposition Plan:</b> This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Yes	Prior	<u>SCC Parks</u>

### 3.16 Wildfire

	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact WIL-1:</b> Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	Impact WIL-1, pp. 3.17-14-3.17-15	SPR HAZ-2 SPR HAZ-3 SPR HAZ-4	LTS	Yes	SPR HAZ-2 SPR HAZ-3 SPR HAZ-4	LTS	<input checked="" type="checkbox"/>

The primary goal of the project is to reduce onsite fuels and increase forest resilience through the implementation of shaded fuel breaks and ecological restoration treatments. The proposed vegetation treatments could result in a temporary increase in fire risk. The use of prescribed pile burning, heavy machinery, and mechanized hand tools on the project site could result in increased fire risk, such as a prescribed fire escaping control lines or an accidental ignition. The potential increase in exposure to wildfire from implementation of treatment activities was examined in the PEIR. The project would include prescribed burning. For prescribed pile burning, the burn piles would be limited in size and burning would occur when conditions are favorable for burning. Prior to broadcast burning, the project proponent would create a burn plan using the CAL FIRE burn plan template to minimize burn severity as required by SPR AQ-3. The manual treatments on the project site would include the use of handheld equipment (e.g., chainsaws) to cut vegetation. The project proponent would require mechanized hand tools to have state approved spark arrestors to reduce accidental ignition per SPR HAZ-2. SPR HAZ-3 would be implemented for manual treatments as well, which would require each tree cutting crew to carry one fire extinguisher per chainsaw and each vehicle to carry one long-handled shovel and either an axe or Pulaski, per California Public Resources Code, Section 4458, to quickly respond to an ignition if one occurs. The project would also utilize heavy machinery to implement vegetation treatments, which would be required to be equipped with state approved spark arrestors. The project proponent would also prohibit smoking in vegetated areas, per SPR HAZ-4; designated smoking areas would be barren or cleared to mineral soil with a minimum 3-foot diameter to reduce the possibility of accidental fire ignition. Therefore, the impact associated with the treatment activities on wildfire risk is the same in both areas. The project would not result in a substantially more significant impact than that covered in the PEIR, and the impact would be less than significant.

<b>Impact WIL-2:</b> Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	Impact WIL-2, pp. 3.17-15 - 3.17-16	SPR AQ-3 SPR GEO-3 SPR GEO-4 SPR GEO-5 SPR GEO-8	LTS	Yes	SPR AQ-3 SPR GEO-3 SPR GEO-4 SPR GEO-5 SPR GEO-7	LTS	<input checked="" type="checkbox"/>
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	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
					SPR GEO-8		

**Impact Discussion:** The proposed project treatment activities would include manual and mechanical treatments and prescribed burning. Steep slopes are present in the project area, and the removal of vegetation and prescribed burning could result in slope instability. Two residences and multiple campgrounds are located within Sanborn County Park. Residents and visitors to these areas could be exposed to post fire flooding or landslides. However, the project would minimize erosion by prohibiting the use of heavy equipment on slopes greater than 65%, and slopes greater than 50% would be inspected by an RFP or licensed geologist prior to implementing treatments (SPR GEO-7). Prescribed burning would require preparation of a Burn Plan and would be conducted such that soil burn would be minimized (SPR AQ-3). Further, proposed project treatments would not result in complete vegetation removal, which would help to maintain stability of the soil. As described in Section 7.1 of the FHP, fuel break treatments would increase horizontal and vertical spacing between understory vegetation, and ecological restoration treatments would be designed to increase forest health. LiDAR for the Forest Health Plan found evidence of unstable soils and landslides within the Lake Ranch Revisor and Lyndon Canyon Creek Wildfire Resiliency Projects. The U.S. Landslide Inventory also indicates the project is in an area with a history of landslides (USGS 2022). Future heavy precipitation events or treatment activities could impact unstable soils and landslides areas. Areas that were identified by LiDAR as having unstable soils and landslides will be avoided and designated as a No Work zones to avoid further soil disturbance.

While steep slopes are present in the project area, SPRs GEO-3, GEO-4, GEO-5, GEO-7 and GEO-8 would be implemented, which would minimize issues related to slope instability. Additionally, No Work zones have been established in areas of sensitive environmental resources and environmental constraints such as steep slopes with erodible soils.

Therefore, the project is not anticipated to expose people or structures to substantial risks from post-prescribed burning landslides or flooding. Consistent with the PEIR, impacts would be less than significant, and the project would not result in a substantially more severe significant impact.

<b>Other Impacts related to Wildfire:</b> Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?		N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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The project is consistent with the CalVTP, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.17 of the PEIR. The impacts associated with the proposed project were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to wildfire that were not addressed in the PEIR.



### 3.17 Administrative Standard Project Requirements

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<p><b>SPR AD-1 Project Proponent Coordination:</b> For treatments coordinated with CAL FIRE, CAL FIRE would meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.</p>	Yes	<p><u>SCC Parks</u> Prior</p>	<p><u>SCC Parks</u></p>
<p><b>SPR AD-2 Delineate Protected Resources:</b> 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.</p>	Yes	<p><u>SCC Parks</u> Prior-During</p>	<p>SCC Parks</p>
<p><b>SPR AD-3 Consistency with Local Plans, Policies, and Ordinances:</b> 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.</p>	Yes	<p><u>SCC Parks</u> Prior-During</p>	<p>SCC Parks</p>
<p><b>SPR AD-4 Public Notifications for Prescribed Burning:</b> 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</p>	Yes	<p><u>SCC Parks</u> Prior</p>	<p><u>SCC Parks</u></p>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<p>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.</p>			
<p><b>SPR AD-5 Maintain Site Cleanliness:</b> 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.</p>	Yes	<u>SCC Parks</u> During-Post	<u>SCC Parks</u>
<p><b>SPR AD-6 Public Notifications for Treatment Projects.</b> 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.</p>	Yes	<u>SCC Parks</u> Prior	<u>SCC Parks</u>
<p><b>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects.</b> 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.</p>	Yes	<u>SCC Parks</u> Prior-During-Post	<u>SCC Parks</u>
<p><b>SPR AD-8 Request Access for Post-Treatment Assessment.</b> For projects, during contract development, 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.</p>	Yes	<u>SCC Parks</u> Prior-During	<u>SCC Parks</u>

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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.			
<b>SPR AD-9 Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required.</b> When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	No	N/A	N/A

### 3.18 Mandatory Findings of Significance

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

### 3.19 Discussion

No additional comments.



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## 4 References

- Agency for Toxic Substances and Disease Registry. 2007. "Naturally Occurring Asbestos Locations in the Contiguous USA and Alaska" [map]. Accessed March 2007. <https://www.atsdr.cdc.gov/noa/docs/usamap.pdf>.
- BAAQMD (Bay Area Air Quality Management District). 2021. "Current Rules." Bay Area Air Quality Management District. Accessed June 28, 2022. <https://www.baaqmd.gov/rules-and-compliance/current-rules>.
- CAL FIRE (California Department of Forestry and Fire Protection) et al. 2021. Santa Clara Unit 2021 Strategic Fire Plan. [https://osfm.fire.ca.gov/media/j3jbgupf/2021\\_scu\\_fireplan.pdf](https://osfm.fire.ca.gov/media/j3jbgupf/2021_scu_fireplan.pdf)
- Caltrans (California Department of Transportation). 2018. "State Scenic Highway Map" [map]. Accessed June 17, 2022. <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>.
- CARB (California Air Resources Board). 2017. *California's 2017 Climate Change Scoping Plan*. Accessed March 2021. [https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf).
- CARB. 2019. *California 2030 Natural and Working Lands Climate Change Implementation Plan*. Draft. January 2019. Accessed March 2021. <https://ww2.arb.ca.gov/sites/default/files/2020-10/draft-nwl-ip-040419.pdf>.
- CDFW (California Department of Fish and Wildlife). 2018. Notice of Findings for Foothill Yellow-Legged Frog (*Rana boylei*). <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157562&inline>.
- CDFW. 2017. CDFW Open Data, California Streams. <https://data-cdfw.opendata.arcgis.com/datasets/CDFW::california-streams/explore?location=37.276617%2C-122.109283%2C14.51>
- CDFW. 2022a. *California Natural Diversity Database (CNDDDB)*. RareFind 5, Version 5.2.14. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed June 2022. <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx>.
- CDFW. 2022b. "California Natural Communities." Sacramento, California: CDFW, Vegetation Classification and Mapping Program. July 5, 2022. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>.
- CNPS (California Native Plant Society). 2022. *A Manual of California Vegetation*, Online Edition. Sacramento, California: CNPS. Accessed June 2022. <https://vegetation.cnps.org>.
- DTSC (California Department of Toxic Substances Control). 2022. "EnviroStor." DTSC.
- Dudek. 2023. *Sanborn-Upper Stevens Creek County Parks Forest Health Plan*.
- eBird. 2022. eBird: An online database of bird distribution and abundance [web application]. Ithaca, New York: Cornell Lab of Ornithology. Accessed June 2022. <http://www.ebird.org>.

- Forest Climate Action Team. 2018. *California Forest Carbon Plan: Managing Our Forest Landscapes in a Changing Climate*. Accessed March 2021. <https://resources.ca.gov/CNRALegacyFiles/wp-content/uploads/2018/05/California-Forest-Carbon-Plan-Final-Draft-for-Public-Release-May-2018.pdf>.
- PlaceWorks. 2019. Sanborn County Park Final Master Plan, Santa Clara County Parks.
- Santa Clara County. 1994. Santa Clara County General Plan Book A. Accessed June 17, 2022. [https://stgenpln.blob.core.windows.net/document/GP\\_Book\\_A.pdf](https://stgenpln.blob.core.windows.net/document/GP_Book_A.pdf).
- Santa Clara County. 2006. "Tree Preservation and Removal." February 11, 1997; last updated March 28, 2006. [https://library.municode.com/ca/santa\\_clara\\_county/codes/code\\_of\\_ordinances?nodeId=TITCCODELAUS\\_DIVC16TRPRRE](https://library.municode.com/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITCCODELAUS_DIVC16TRPRRE).
- Santa Clara County. 2016. Land Use Plan. [https://stgenpln.blob.core.windows.net/document/landuse\\_plan\\_map.pdf](https://stgenpln.blob.core.windows.net/document/landuse_plan_map.pdf)
- Santa Clara County. 2021. County of Santa Clara Sustainability Master Plan. January 2021. Accessed June 17, 2022. [https://www.sccsustainabilityplan.org/\\_files/ugd/e3bef4\\_e4d3346ef28c4afc8af2c5a07748b02b.pdf](https://www.sccsustainabilityplan.org/_files/ugd/e3bef4_e4d3346ef28c4afc8af2c5a07748b02b.pdf).
- Santa Clara County. 2022a. SCC Municipal Code Division C16 Tree Preservation and Removal. Accessed June 17, 2022. [https://library.municode.com/ca/santa\\_clara\\_county/codes/code\\_of\\_ordinances?nodeId=TITCCODELAUS\\_DIVC16TRPRRE](https://library.municode.com/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITCCODELAUS_DIVC16TRPRRE).
- Santa Clara County. 2022b. SCC Land Development Standards and Policies Manual. 2022. Accessed June 20, 2022. [https://stgenpln.blob.core.windows.net/document/StandardsPoliciesManual\\_Vol1.pdf](https://stgenpln.blob.core.windows.net/document/StandardsPoliciesManual_Vol1.pdf).
- Santa Clara County. 2022c. SCC Municipal Code Section B11-154-Prohibited acts. 2022. Accessed June 20, 2022. [https://library.municode.com/ca/santa\\_clara\\_county/codes/code\\_of\\_ordinances?nodeId=TITBRE\\_DIVB11ENHE\\_CHVIIIICONOVI\\_SB11-152EXNOLI](https://library.municode.com/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITBRE_DIVB11ENHE_CHVIIIICONOVI_SB11-152EXNOLI).
- Santa Clara County. n.d. Zoning map. <https://geoess.sccgov.org/discovergis/sccmap>
- Santa Clara County Parks (Santa Clara County Parks and Recreation Department). 1993. Upper Stevens Creek County Park Management Plan. <https://parks.sccgov.org/sites/g/files/exjcpb961/files/upper-stevens-creek-county-park-resource-management-plan-april-1993.pdf>.
- Santa Clara County Parks. 2019. Sanborn County Park Final Master Plan. June 4, 2019. Accessed June 20, 2022. <https://parks.sccgov.org/sites/g/files/exjcpb961/files/sanborn-master-plan-final.pdf>.
- Santa Clara County Parks. 2022. *Santa Clara County Parks*. Santa Clara County Parks. Accessed June 30, 2022. <https://parks.sccgov.org/santa-clara-county-parks>.
- Santa Clara Valley Audubon Society. 2012. "American Peregrine Falcon." [https://kipdf.com/the-peregrine-falcons-of-summit-rock\\_5ac1d1a21723dd47802cc83b.html](https://kipdf.com/the-peregrine-falcons-of-summit-rock_5ac1d1a21723dd47802cc83b.html).
- SWRCB (California State Water Resources Control Board). 2021. Vegetation Treatment General Order No. 2021-0026. Nonpoint Source Pollution (NPS) - Vegetation Treatment | California State Water Resources Control Board.

SWRCB. 2022. "GeoTracker." Accessed July 2022.

USFWS (United States Fish and Wildlife Service). 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog.

USFWS. 2022. National Wetlands Inventory. Accessed June 2022.  
<https://www.fws.gov/program/nationalwetlands-inventory/wetlands-mapper>.

USGS (U.S. Geologic Survey). 2011. *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California*. USGS.

USGS. 2022. *U.S. Landslide Inventory*. [MAP]. USGS. Accessed June 29, 2022. <https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d>.

Valley Water. 2017. *Santa Clara County Groundwater Subbasins*. [MAP]. Santa Clara County Valley Water District. <https://data-valleywater.opendata.arcgis.com/datasets/valleywater::santa-clara-county-groundwater-subbasins/explore?location=37.199407%2C-121.827700%2C11.15>.

Valley Water. 2021. *Water Bodies, Creeks, and Major Watersheds*. [MAP]. Santa Clara Valley Water District. <https://data-valleywater.opendata.arcgis.com/documents/water-bodies-creeks-and-major-watersheds/explore>.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. *California's Wildlife*. Vol. I-III. California Depart. Of Fish and Game, Sacramento, California.



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## 5 Additional Information:

- List of Standard Project Requirements (SPRs) and Mitigations Measures (MMs) (see Attachment A)
- Vicinity map on a USGS quad map (SPR AD-2)
  - Aerial imagery of subsequent activity area (see Figures 3-1 through 3-3)
  - Subsequent activity location on Treatable Landscape & Ecoregions Map (see Figures 4-1 through 4-3 and Attachment D)
  - Parcel map with APN's covering all ownerships within subsequent activity area (see Figures 4-1 through 4-3)
    - Soil survey map of subsequent activity area (see Attachment E)
- Smoke Management Plan/Burn Plan (SPR AQ-2 & 3)
  - Public Notice for Prescribed Burning – Post
  - Model run of FOFEM, BEHAVE, or other appropriate fire behavior modeling simulation – Post
  - Burn Unit Maps – Ortho and Topographic – Post
- Air District Asbestos Dust Control Plan (SPR AQ-5)
- Incident Action Plan (IAP) (SPR AQ-6) – Post
- Archaeological reviews/surveys (see Attachment C)
- Biological review/surveys
  - CNDDDB Records Search
  - Biologist Consultation/Notification
  - Water Quality consultation
  - Consult Attachment D (and Cal VTP Appendix BIO-3)
- Biological Compensation Plan (MM BIO-1c, 2c, 2d, 2e, 2f, 3b, 3c,)
- Geological Review
- Spill Prevention & Response Plan (SPR HAZ-5)
- Traffic Management Plan (SPR TRAN-1) – Post, if necessary
- Organic waste Disposal Plan (SPR UTIL-1)
- Air Quality and GHG Emissions Estimates (SPR GHG-1)
  - Air Quality consultations
- Off-Site Noise-Sensitive Receptors Notification (SPR NOI-6)
- Other \_\_\_\_\_

## DELIVERABLES POST APPROVAL

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

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# **Attachment A**

## Standard Project Requirements and Mitigation Measures Checklist





# Attachment A – Standard Project Requirements and Mitigation Measures Checklist

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

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

The following applicable Standard Project Requirements and Mitigation Measures will be incorporated into the project as required by the CalVTP Program Environmental Impact Report. Project-specific requirements, edits, and clarifications to the following Standard Project Requirements and Mitigation Measures are shown in underline and ~~strikethrough~~.

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Administrative Standard Project Requirements</b>				
<p><b>SPR AD-1 Project Proponent Coordination:</b> 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.</p>	<p><b>Initial Treatment:</b> N</p> <p><b>Treatment Maintenance:</b> N</p>	N/A	N/A	N/A
<p><b>SPR AD-2 Delineate Protected Resources:</b> 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, <u>or an archaeologically trained resource professional and/or qualified archaeologist including those with a CAL FIRE Cultural Resources Survey Certification</u>). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	Prior-During	SCC Parks	SCC Parks
<p><b>SPR AD-3 Consistency with Local Plans, Policies, and Ordinances:</b> 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.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	Prior-During	SCC Parks	SCC Parks
<p><b>SPR AD-4 Public Notifications for Prescribed Burning:</b> At least days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	Prior	SCC Parks	SCC Parks

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.</p>				
<p><b>SPR AD-5 Maintain Site Cleanliness:</b> 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.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>During-Post</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>
<p><b>SPR AD-6 Public Notifications for Treatment Projects.</b> 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.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>
<p><b>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects.</b> 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.</p> <p>Information on proposed projects (PSA in progress):</p> <ul style="list-style-type: none"> <li>▪ GIS data that include project location (as a point);</li> <li>▪ project size (typically acres);</li> <li>▪ treatment types and activities; and</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During-Post</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ contact information for a representative of the project proponent.</li> </ul> <p>The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent’s own website).</p> <p>Information on approved projects (PSA complete):</p> <ul style="list-style-type: none"> <li>▪ A completed PSA Environmental Checklist;</li> <li>▪ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);</li> <li>▪ 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).</li> </ul> <p>Information on completed projects:</p> <ul style="list-style-type: none"> <li>▪ 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)</li> <li>▪ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes                             <ul style="list-style-type: none"> <li>- Size of treated area (typically acres);</li> <li>- Treatment types and activities;</li> <li>- Dates of work;</li> <li>- A list of the SPRs and mitigation measures that were implemented</li> <li>- 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).</li> </ul> </li> </ul> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>				
<p><b>SPR AD-8 Request Access for Post-Treatment Assessment.</b> For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired</p>	<p><b>Initial Treatment: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	<b>Treatment Maintenance: Y</b>			
<p><b>SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required.</b> When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions:</p> <ul style="list-style-type: none"> <li>i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and</li> <li>ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP.</li> </ul> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<b>Initial Treatment: N</b>  <b>Treatment Maintenance: N</b>	N/A	N/A	N/A
<b>Administrative Standard Project Requirements</b>				
<p><b>SPR AES-1 Vegetation Thinning and Edge Feathering:</b> 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</p>	<b>Initial Treatment: Y</b>	During	SCC Parks	SCC Parks

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>	<p><b>Treatment Maintenance:</b> Y</p>			
<p><b>SPR AES-2 Avoid Staging within Viewsheds:</b> 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.</p>	<p><b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR AES-3 Provide Vegetation Screening:</b> 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.</p>	<p><b>Initial Treatment :</b> Y  <b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>Air Quality Standard Project Requirements</b></p>				
<p><b>SPR AQ-1 Comply with Air Quality Regulations:</b> 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.</p>	<p><b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR AQ-2 Submit Smoke Management Plan:</b> The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities</p>	<p><b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y</p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
and all treatment types, including treatment maintenance.				
<p><b>SPR AQ-3 Create Burn Plan:</b> The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR AQ-4 Minimize Dust:</b> To minimize dust during treatment activities, the project proponent will implement the following measures:</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ This SPR applies to all treatment activities and treatment types, including treatment maintenance.</li> </ul>				
<p><b>SPR AQ-5 Avoid Naturally Occurring Asbestos:</b> 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.</p>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>			
<p><b>SPR AQ-6: Prescribed Burn Safety Procedures.</b> Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	During	SCC Parks	SCC Parks
<b>Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements</b>				
<p><b>SPR CUL-1 Conduct Record Search:</b> 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</p>	<p><b>Initial Treatment: Y</b></p>	Prior	SCC Parks/Dudek	SCC Parks

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Treatment Maintenance: Y			
<p><b>SPR CUL-2 Contact Geographically Affiliated Native American Tribes:</b> 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:</p> <ul style="list-style-type: none"> <li>▪ A written description of the treatment location and boundaries.</li> <li>▪ Brief narrative of the treatment objectives.</li> <li>▪ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.</li> <li>▪ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.</li> <li>▪ A request for information regarding potential impacts to cultural resources from the proposed treatment.</li> <li>▪ A detailed description of the depth of excavation, if ground disturbance is expected.</li> </ul> <p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior	SCC Parks	SCC Parks
<p><b>SPR-CUL-3 Pre-field Research:</b> 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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior	SCC Parks/Dudek	SCC Parks
<p><b>SPR CUL-4 Archaeological Surveys:</b> 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.,</p>	<p>Initial Treatment: Y</p>	Prior	SCC Parks/Dudek	SCC Parks

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>	<p><b>Treatment Maintenance:</b> Y</p>			
<p><b>SPR CUL-5 Treatment of Archaeological Resources:</b> 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.</p> <p><u>Manual treatment of vegetation (no mechanized treatment) can occur within the boundaries of unavoidable archaeological sites with the presence of a qualified archaeological monitor (including those with a CAL FIRE Cultural Resources Survey Certification).</u></p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR CUL-6 Treatment of Tribal Cultural Resources:</b> 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</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>N/A</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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.				
<b>SPR CUL-7 Avoid Built Historical Resources:</b> 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.	Initial Treatment: Y  Treatment Maintenance: Y	Prior-During	SCC Parks	SCC Parks
<b>SPR CUL-8 Cultural Resource Training:</b> The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y  Treatment Maintenance: Y	Prior-During	SCC Parks	SCC Parks
<b>Biological Resources Standard Project Requirements</b>				
<b>SPR BIO-1: Review and Survey Project-Specific Biological Resources.</b> The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDDB, California Native Plant Society	Initial Treatment: Y  Treatment Maintenance: Y	Prior	SCC Parks	SCC Parks



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>(CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:</p>				
<p><b>1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.</b> 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:</p> <ul style="list-style-type: none"> <li>a. by physically avoiding the suitable habitat, or</li> <li>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).</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p><b>2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided.</b> Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: <a href="https://www.wildlife.ca.gov/Conservation/Survey-Protocols">https://www.wildlife.ca.gov/Conservation/Survey-Protocols</a>. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	<p>N/A</p>		
<p><b>SPR BIO-2: Require Biological Resource Training for Workers.</b> 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,</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>				
<b>Sensitive Natural Communities and Other Sensitive Habitats</b>				
<p><b>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.</b> 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:</p> <ul style="list-style-type: none"> <li>▪ 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 <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>), or referring to relevant reports (e.g., reports found on the VegCAMP website).</li> <li>▪ 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.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.</b> 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:</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul>				



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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).</li> <li>▪ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.</li> </ul>				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p><b>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.</b> 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).</p> <p>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</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>interval departure of the chaparral and/or coastal sage scrub present in each treatment area.</p> <p>For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> </ul> <p>These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.</p> <p>Additional measures will be applied to ecological restoration treatment types:</p> <ul style="list-style-type: none"> <li>▪ For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.</li> </ul>				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul> <p>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.</p> <p>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</p>				



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>				
<p><b>SPR BIO-6: Prevent Spread of Plant Pathogens.</b> When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of <i>Phytophthora</i> and other plant pathogens (e.g., pitch canker (<i>Fusarium</i>), goldspotted oak borer, shot hole borer, bark beetle):</p> <ul style="list-style-type: none"> <li>▪ 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;</li> <li>▪ include training on <i>Phytophthora</i> diseases and other plant pathogens in the worker awareness training;</li> <li>▪ 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;</li> <li>▪ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;</li> <li>▪ 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</li> <li>▪ 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 <i>Phytoptheras</i> in Native Habitats 2016).</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<b>Special-Status Plants</b>				
<p><b>SPR BIO-7: Survey for Special-Status Plants.</b> 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</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>Native Plant Populations and Sensitive Natural Communities.”</p> <p>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.</p> <p>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.</p> <p>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:</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<b>Environmentally Sensitive Habitat Areas</b>				
<p><b>SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs.</b> When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species</p>	<p>Initial Treatment: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts:</p> <ul style="list-style-type: none"> <li>▪ The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA.</li> <li>▪ Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the vegetation types present in the ESHA.</li> <li>▪ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs.</li> <li>▪ Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs.</li> </ul> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Treatment Maintenance:</b> N</p>			
<b>Invasive Plants and Wildlife</b>				
<p><b>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.</b> 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):</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>The majority of the forest health actions would not involve herbicides. Only broom and other invasive plant species would be controlled using herbicide in accordance with the County’s IPM Policy and Ordinance. For areas that contain broom and other invasive plant species that need to be treated with herbicide, these treatments would not be applied in any area within 300 feet of potential aquatic California red-legged frog/foothill yellow-legged frog habitat.</u></li> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ 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;</li> <li>▪ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;</li> </ul>				



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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;</li> <li>▪ 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</li> <li>▪ 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).</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<b>Wildlife</b>				
<p><b>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.</b> 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.</p> <p>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</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><u>Project-Specific Requirements</u></p> <ul style="list-style-type: none"> <li>▪ <u>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.</u></li> <li>▪ <u>Prior to implementing treatment activities, a qualified biologist will conduct reconnaissance surveys within the treatment areas for suitable Crotch bumble bee and western bumble bee habitat that contains associated floral resources. If suitable habitat is present, Mitigation Measure BIO-2g will apply, and all treatment activities will avoid those areas. If special-status bumble bee nesting sites are found during project activities, no-disturbance buffers will be placed around the nesting sites, and treatment activities will avoid these areas until the end of the bumble bee nesting season.</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>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.</u></li> </ul>				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>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.</u></li> <li>▪ <u>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).</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>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).</u></li> <li>▪ <u>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.</u></li> </ul>				
<p><b>SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory).</b> If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design will meet the following standards:</p> <ul style="list-style-type: none"> <li>▪ Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale or snag a leaping animal; and, if feasible, keeping electric netting-type fencing electrified at all times or laid down while not in use.</li> </ul>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted.</li> <li>▪ Allow wildlife to jump over easily without injury by installing fencing that can flex as animals pass over it and installing the top wire low enough (no more than approximately 40 inches high on flat ground) to allow adult ungulates to jump over it. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass.</li> <li>▪ Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers.</li> </ul> <p>This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.</p>				
<p><b>SPR BIO-12. Protect Common Nesting Birds, Including Raptors.</b> 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.</p> <p>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., CNDDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identify the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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).</p> <p>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:</p> <ul style="list-style-type: none"> <li>▪ <b>Establish Buffer.</b> 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.</li> <li>▪ <b>Modify Treatment.</b> 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.</li> <li>▪ <b>Defer Treatment.</b> 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.</li> </ul>				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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).</p> <p>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:</p> <ul style="list-style-type: none"> <li>▪ <b>Monitor Active Raptor Nest During Treatment.</b> 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.</li> <li>▪ <b>Retention of Raptor Nest Trees.</b> Trees with visible raptor nests, whether occupied or not, will be retained.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<b>Geology, Soils, and Mineral Resource Standard Project Requirements</b>				
<p><b>SPR GEO-1 Suspend Disturbance during Heavy Precipitation:</b> The project proponent will suspend mechanical, prescribed herbivory, and herbicide</p>	<p>Initial Treatment: Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p><u>Project-Specific Requirements</u></p> <ul style="list-style-type: none"> <li>▪ <u>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.</u></li> </ul>	<p><b>Treatment Maintenance:</b> Y</p>			
<p><b>SPR GEO-2 Limit High Ground Pressure Vehicles:</b> 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.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR GEO-3 Stabilize Disturbed Soil Areas:</b> The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over</p>	<p><b>Initial Treatment:</b> Y</p>	<p>During - Post</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>	<p><b>Treatment Maintenance:</b> Y</p>			
<p><b>SPR GEO-4 Erosion Monitoring:</b> 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.</p>	<p><b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y</p>	<p>During - Post</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR GEO-5 Drain Stormwater via Water Breaks:</b> 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.</p>	<p><b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p><b>SPR GEO-6 Minimize Burn Pile Size:</b> The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR GEO-7 Minimize Erosion:</b> To minimize erosion, the project proponent will:</p> <ol style="list-style-type: none"> <li>(1) Prohibit use of heavy equipment where any of the following conditions are present:                             <ol style="list-style-type: none"> <li>(i) Slopes steeper than 65 percent.</li> <li>(ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.</li> <li>(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.</li> </ol> </li> <li>(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:                             <ol style="list-style-type: none"> <li>(i) Existing tractor roads that do not require reconstruction, or</li> <li>(ii) New tractor roads flagged by the project proponent prior to the treatment activity.</li> </ol> </li> <li>(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope.</li> </ol> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>During - Post</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR GEO-8 Steep Slopes:</b> 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 identify measures (e.g., those in SPR GEO-7) that will be</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>				
<b>Greenhouse Gas Emissions Standard Project Requirements</b>				
<p><b>SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process:</b> The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment:</b> N</p> <p><b>Treatment Maintenance:</b> N</p>	N/A	N/A	N/A
<b>Hazardous Material and Public Health and Safety Standard Project Requirements</b>				
<p><b>SPR HAZ-1 Maintain All Equipment:</b> 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.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	Prior-During	SCC Parks	SCC Parks
<p><b>SPR HAZ-2 Require Spark Arrestors:</b> 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.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	During	SCC Parks	SCC Parks
<p><b>SPR HAZ-3 Require Fire Extinguishers:</b> 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.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	During	SCC Parks	SCC Parks
<p><b>SPR HAZ-4 Prohibit Smoking in Vegetated Areas:</b> The project proponent will require that smoking is only permitted in designated smoking areas barren or</p>	<p><b>Initial Treatment:</b> Y</p>	During	SCC Parks	SCC Parks

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	Treatment Maintenance: Y			
<p><b>SPR HAZ-5 Spill Prevention and Response Plan:</b> 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):</p> <ul style="list-style-type: none"> <li>▪ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;</li> <li>▪ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;</li> <li>▪ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior-During	SCC Parks	SCC Parks
<p><b>SPR HAZ-6 Comply with Herbicide Application Regulations:</b> 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:</p> <ul style="list-style-type: none"> <li>▪ Be implemented consistent with recommendations prepared annually by a licensed PCA.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ Be applied by an applicator appropriately licensed by the State.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	SCC Parks	SCC Parks

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR HAZ-7 Triple Rinse Herbicide Containers:</b> 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.</p> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>
<p><b>SPR HAZ-8 Minimize Herbicide Drift to Public Areas:</b> The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas:</p> <ul style="list-style-type: none"> <li>▪ 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);</li> <li>▪ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift;</li> <li>▪ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and</li> <li>▪ spray nozzles will be kept within 24 inches of vegetation during spraying.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>
<p><b>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas:</b> 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;</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p>				
<b>Hydrology and Water Quality Standard Project Requirements</b>				
<p><b>SPR HYD-1 Comply with Water Quality Regulations:</b> 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.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>
<p><b>SPR HYD-2 Avoid Construction of New Roads:</b> 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.</p>	<p><b>Initial Treatment: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity										
	Treatment Maintenance: Y													
<p><b>SPR HYD-3 Water Quality Protections for Prescribed Herbivory:</b> The project proponent will include the following water quality protections for all prescribed herbivory treatments:</p> <ul style="list-style-type: none"> <li>Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet will be maintained between sensitive and actively grazed areas.</li> <li>Water will be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of environmentally sensitive areas.</li> <li>Treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed.</li> </ul> <p>This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A										
<p><b>SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:</b> 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.</p> <p><b>Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths</b></p> <table border="1"> <thead> <tr> <th>Water Class</th> <th>Class I</th> <th>Class II</th> <th>Class III</th> <th>Class IV</th> </tr> </thead> <tbody> <tr> <td>Water Class Characteristic s or Key Indicator Beneficial Use</td> <td>1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally</td> <td>1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species.</td> <td>No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions</td> <td>Man-made watercourses , usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.</td> </tr> </tbody> </table>	Water Class	Class I	Class II	Class III	Class IV	Water Class Characteristic s or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions	Man-made watercourses , usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior	SCC Parks	SCC Parks
Water Class	Class I	Class II	Class III	Class IV										
Water Class Characteristic s or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions	Man-made watercourses , usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.										

Standard Project Requirements				Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
	present onsite, includes habitat to sustain fish migration and spawning.	3) Excludes Class III waters that are tributary to Class I waters.	after completion of timber operations.				
<b>WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ</b>							
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.				
30-50 % Slope	100	75					
>50 % Slope	150	100					
Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version)							
<p>The following WLPZ protections will be applied for all treatments:</p> <ul style="list-style-type: none"> <li>▪ 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).</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul>							

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.</li> <li>▪ Burn piles will be located outside of WLPZs.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p><b>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:</b> The project proponent will implement the following measures when applying herbicides:</p>	<p><b>Initial Treatment: Y</b></p>	<p><b>During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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);</li> <li>▪ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.</li> </ul> <p>This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Treatment Maintenance:</b> Y</p>			
<p><b>SPR HYD-6 Protect Existing Drainage Systems:</b> 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</p>	<p><b>Initial Treatment:</b> Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	<b>Treatment Maintenance:</b> Y			
<b>Noise Standard Project Requirements</b>				
<b>SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:</b> 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.	<b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y	During	SCC Parks	SCC Parks
<b>SPR NOI-2 Equipment Maintenance:</b> 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.	<b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y	During	SCC Parks	SCC Parks
<b>SPR NOI-3 Engine Shroud Closure:</b> 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.	<b>Initial Treatment:</b> Y  <b>Treatment Maintenance:</b> Y	During	SCC Parks	SCC Parks



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses:</b> 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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR NOI-5 Restrict Equipment Idle Time:</b> 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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:</b> 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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>
<p><b>Recreation Standard Project Requirements</b></p>				
<p><b>SPR REC-1 Notify Recreational Users of Temporary Closures.</b> If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<b>Transportation Standard Project Requirements</b>				
<p><b>SPR TRAN-1 Implement Traffic Control during Treatments:</b> 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.</p> <p>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.</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Public Services and Utilities Standard Project Requirements</b>				
<p><b>SPR UTIL-1: Solid Organic Waste Disposition Plan.</b> 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.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	Prior	SCC Parks	SCC Parks

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Aesthetics and Visual Resources</b>				
<p><b>Mitigation Measure AES-3:</b> Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks</p> <p>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.</p> <p>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</p>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p>				
<b>Air Quality</b>				
<p>Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</p> <p>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 be 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.</p> <p>Techniques for reducing emissions may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>▪ 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.</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria:                             <ul style="list-style-type: none"> <li>- meet California’s Low Carbon Fuel Standards and be certified by CARB Executive Officer;</li> <li>- 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;</li> <li>- contain no fatty acids or functionalized fatty acid esters; and</li> <li>- 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.</li> </ul> </li> <li>▪ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment.</li> <li>▪ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes.</li> <li>▪ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO<sub>x</sub> and PM.</li> </ul>				
<b>Archaeological, Historical, and Tribal Cultural Resources</b>				
<p><b>Mitigation Measure CUL-2:</b> Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</p> <p>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 <u>or archaeologically trained resources professional, such as those with a CAL FIRE Cultural Resource Survey Certification</u>, 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</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p>During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p>				
<b>Biological Resources</b>				
<p><b>Mitigation Measure BIO-1a:</b> Avoid Loss of Special-Status Plants Listed under ESA or CESA</p> <p>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</p>	<p><b>Initial Treatment:</b> Y</p> <p><b>Treatment Maintenance:</b> Y</p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (nor use of associated accelerants) will occur within 50 feet of listed plants.</p> <p>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.</p> <p>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.</p>				
<p><b>Mitigation Measure BIO-1b:</b> Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</p> <p>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:</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer.</li> </ul> <p>A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p> <p>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.</p>				
<p><b>Mitigation Measure BIO-1c:</b> Compensate for Unavoidable Loss of Special-Status Plants</p> <p>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</p>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>be compensated. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency’s requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment.</p> <p>The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead:</p> <ul style="list-style-type: none"> <li>▪ creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species);</li> <li>▪ purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and</li> <li>▪ if the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future.</li> </ul> <p>If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:</p> <ul style="list-style-type: none"> <li>▪ the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Relocated/re-established populations will be considered suitable for self-producing when:</li> <li>▪ habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and</li> </ul>				



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.</li> </ul> <p>If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.</p> <p>If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.</p> <p>If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.</p> <p>If the loss of occupied habitat cannot be offset (e.g., if preservation of existing populations or creation of new populations through relocation efforts are not available for a certain species), and as a result treatment activities would substantially reduce the number or restrict the range of listed plant species, then the treatment will not qualify as within the scope of this PEIR.</p> <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g.,</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.</p>				
<p><b>Mitigation Measure BIO-2a:</b> Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)</p> <p>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.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <p>The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:</p> <ol style="list-style-type: none"> <li>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</li> <li>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.                     <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> </ul> </li> </ol> <p><u>Maintain Habitat Function</u></p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ The project proponent will design treatment activities to maintain the habitat function, by implementing the following:                             <ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> <li>- 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.</li> </ul> </li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p><u>Project-Specific Requirements</u></p> <p><u>California Red-Legged Frog</u></p> <ul style="list-style-type: none"> <li>▪ <u>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:</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>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.</u></li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>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.</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>No heavy equipment shall be fueled within 65 feet of any watercourse.</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>Cut stump and basal bark applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat.</u></li> </ul> <p><u>Foothill Yellow-Legged Frog</u></p> <ul style="list-style-type: none"> <li>▪ <u>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.</u></li> </ul>				



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>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).</u></li> </ul> <p><u>San Francisco Garter Snake</u></p> <ul style="list-style-type: none"> <li>▪ <u>Any San Francisco garter snake encountered in the treatment areas should not be handled; a no disturbance buffer should be implemented; and the species should be left alone until it leaves the area on its own. All vehicles and equipment staged near suitable garter snake habitat should be checked for the species prior to moving.</u></li> </ul> <p><u>American Peregrine Falcon</u></p> <ul style="list-style-type: none"> <li>▪ <u>Pre-activity surveys for American peregrine falcon would be conducted by a qualified biologist no more than 72 hours prior to the commencement of vegetation treatment activities to identify and map any active nests. If an active American peregrine falcon nest is found during pre-activity surveys, a no-disturbance buffer of 500 feet would be implemented around the nest during the breeding season (March through June), within which no treatment activities shall occur until a qualified biologist has determined that the chicks have fledged.</u></li> </ul> <p><u>Least Bell’s Vireo</u></p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>If treatment activities will occur within 250 feet of riparian habitat, a qualified biologist will consult the CNDDDB to determine if there has been nesting at the site in the past three years. If there are records of nesting at the site within the past three years, the project proponent is required to avoid the nest sites. If no nesting has been recorded in the past three years, a qualified biologist will conduct a pre-activity survey to identify and map suitable nesting habitat (early successional riparian vegetation dominated by willows with a thick, shrubby understory). If suitable nesting habitat is found during this survey, the project proponent may avoid all areas within a 250-foot buffer of the potential nesting habitat. If the project chooses not to avoid the potential nesting habitat, a qualified biologist would conduct a pre-activity survey during the breeding season (March 15 to July 31) to document the presence or absence of nesting least Bell's vireos following the USFWS 2001 Least Bell's Vireo Survey Guidelines or latest protocol. Surveys would be conducted between dawn and 11:00 am (SCVHA 2017). If project activities will occur during the breeding season, surveys will be completed no more than two calendar days prior to commencement of treatment activities. If an active least Bell's vireo nest is found during pre-activity surveys, a no-disturbance buffer of 250 feet would be implemented around the nest, within which no treatment activities shall occur during the breeding season (March 15 to July 31) until a qualified biologist has determined that the chicks have fledged. The locations of these nests would be submitted to the CNDDDB, USFWS, and CDFW.</u></li> </ul> <p><u>Marbled Murrelet</u></p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li><u>In areas where marbled murrelet nesting habitat may be present, a qualified biologist would conduct a habitat assessment prior to the start of project activities. The habitat assessment would include a visual inspection of suitable nesting habitat features within 0.25 miles of the project area that occur within old growth conifer forested areas. Suitable habitat characteristics are described in Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research (Mack et al. 2003). Habitat features found during the assessment will be identified, flagged, mapped, or marked for avoidance and retention as a sensitive area. If suitable nesting habitat is discovered, a qualified biologist will develop an appropriate no-disturbance buffer around suitable nesting habitat identified within 0.25 miles of the project area during the murrelet nesting season (March 24 to September 15). Project-generated sound must not exceed ambient levels (&lt; 50 decibels) by 20–25 decibels and must not exceed 90 decibels when combined with ambient sound conditions, and human activities must not occur within 330 feet or less line-of sight distance to an active marbled murrelet nest (USFWS 2020). To avoid impacts to marbled murrelets, treatment activities must be conducted during daylight hours only, between the period of 1.5 hours after official sunrise and 1.5 hours before official sunset, avoiding work during dawn and dusk hours during the breeding season (March 24 to September 15)</u></li> </ul> <p><u>White-Tailed Kite</u></p> <ul style="list-style-type: none"> <li><u>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.</u></li> </ul> <p><u>Golden Eagle</u></p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>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.</u></li> </ul> <p><u>Ringtail</u></p> <ul style="list-style-type: none"> <li>▪ 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).</li> <li>▪ 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.</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ 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).</li> <li>▪ <b>Active Dens.</b> 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.</li> </ul> <p><u>Mountain lion</u></p> <ul style="list-style-type: none"> <li>▪ <u>To avoid mortality or injury to mountain lion the following will be implemented.</u></li> </ul>				



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>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.</u></li> <li>▪ <u>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).</u></li> <li>▪ <u>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.</u></li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>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.</li> </ul>				
<p><b>Mitigation Measure BIO-2b:</b> Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</p> <p>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.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <ul style="list-style-type: none"> <li>The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>- 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).</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.</li> <li>▪ 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.</li> </ul> <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> <li>▪ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following:</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.             <ul style="list-style-type: none"> <li>▪ 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.</li> </ul> </li> </ul> <p>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-</p>				



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p> <p>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.</p> <p><b><u>Project-Specific Requirements</u></b></p> <p><u>Special-Status Amphibians and Reptiles</u></p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>▪ <u>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.</u></p> <p><u>Special-Status Birds</u></p> <p>▪ <u>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.</u></p> <p><u>Special-Status Bats</u></p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ <u>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.</u></li> </ul> <p><u>American Badger</u></p> <ul style="list-style-type: none"> <li>▪ <u>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).</u></li> </ul> <p><u>San Francisco Dusky-Footed Woodrat</u></p> <ul style="list-style-type: none"> <li>▪ <u>Woodrat nests will be given a buffer of no between 5 feet and 10 feet where feasible.</u></li> <li>▪ <u>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.</u></li> <li>▪ <u>Nest removal efforts would take place at dusk or dawn when woodrats are least susceptible to predation. Nest removal would not take place during inclement or extreme weather conditions. Prior to nest removal, personal protective equipment should be worn to minimize potential human exposure to possible diseases carried by woodrats. In areas of existing woodrat habitat, pile burning should take place as soon as feasible to reduce the risk of woodrats occupying the debris piles. Prior to burning, debris piles should be disturbed to ensure any woodrats inside of the piles have the opportunity to escape.</u></li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</b></p> <p>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.</p> <p>Compensation may include:</p> <ol style="list-style-type: none"> <li>1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and</li> <li>2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, or removing existing movement barriers or other existing features that are adversely affecting the species).</li> </ol> <p>The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p> <ol style="list-style-type: none"> <li>1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity.</li> </ol>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.</p> <p>Review requirements are as follows:</p> <ul style="list-style-type: none"> <li>▪ 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.</li> <li>▪ For species listed under ESA or CESA or a California Fully Protected Species, the project proponent will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment.</li> <li>▪ For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information.</li> </ul> <p>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.</p>				
<p><b>Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)</b></p> <p>If elderberry shrubs within the documented range of valley elderberry longhorn beetle are identified during review and surveys for SPR BIO-1, and valley elderberry longhorn beetle or likely occupied suitable elderberry habitat (e.g., within riparian, within historic riparian, containing exit holes) is confirmed to be present during protocol-level surveys following the protocol outlined in USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017) per SPR BIO-10, the following protective measures will be implemented to avoid and minimize impacts to valley elderberry longhorn beetle:</p>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	N/A	N/A	N/A



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ If elderberry shrubs are 165 feet or more from the treatment area, and treatment activities would not encroach within this distance, direct or indirect impacts are not expected and further mitigation is not required.</li> <li>▪ If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented:                             <ul style="list-style-type: none"> <li>- A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant will be fenced or flagged and maintained to avoid direct impacts (e.g., damage to root system) that could damage or kill the plant, with the exception of the following activities:                                     <ul style="list-style-type: none"> <li>- Manual trimming of elderberry shrubs will only occur between November and February and will avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects on valley elderberry longhorn beetle.</li> <li>- Manual or mechanical vegetation treatment within the drip-line of any elderberry shrub will be limited to the season when adults are not active (August - February), will be limited to methods that do not cause ground disturbance, and will avoid damaging the elderberry.</li> </ul> </li> </ul> </li> <li>▪ A qualified RPF, biologist, or biological technician familiar with valley elderberry longhorn beetle and its life history will monitor the work area to verify the avoidance and minimization measures are implemented. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to valley elderberry longhorn beetle.</li> </ul> <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of VELB or degradation of occupied habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p>				
<p><b>Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)</b></p> <p>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</p>	<p>Initial Treatment: Y</p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>surveys per SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>▪ Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34).</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> <li>▪ 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.</li> </ul> <p>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.</p> <p><b>CESA and ESA Listed Species.</b> 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.</p> <p><b>Other Special-status Species.</b> A qualified RPF or biologist with knowledge of the special-status species'</p>	<p><b>Treatment Maintenance:</b> Y</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity						
<p>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.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p> <p><b>Table 3.6-34 — Special-status Butterflies and Associated Host Plants</b></p> <table border="1"> <thead> <tr> <th>Butterfly Species</th> <th>Host Plants</th> </tr> </thead> <tbody> <tr> <td>bay checkerspot butterfly</td> <td>dwarf plantain (<i>Plantago virginica</i>), purple owl's clover (<i>Castilleja exserta</i>)</td> </tr> <tr> <td>Behren's silverspot butterfly</td> <td>blue violet (<i>Viola adunca</i>)</td> </tr> </tbody> </table>	Butterfly Species	Host Plants	bay checkerspot butterfly	dwarf plantain ( <i>Plantago virginica</i> ), purple owl's clover ( <i>Castilleja exserta</i> )	Behren's silverspot butterfly	blue violet ( <i>Viola adunca</i> )				
Butterfly Species	Host Plants									
bay checkerspot butterfly	dwarf plantain ( <i>Plantago virginica</i> ), purple owl's clover ( <i>Castilleja exserta</i> )									
Behren's silverspot butterfly	blue violet ( <i>Viola adunca</i> )									

eallippe silverspot butterfly	California golden violet ( <i>Viola pedunculata</i> )				
Carson wandering skipper	salt grass ( <i>Distichlis spicata</i> )				
El Segundo blue butterfly	seacliff buckwheat ( <i>Eriogonum parvifolium</i> )				
Hermes copper butterfly	spiny redberry ( <i>Rhamnus erocca</i> )				
Kern primrose sphinx moth	plains evening-primrose ( <i>Camissonia contorta</i> ), field primrose ( <i>Camissonia campestris</i> )				
Laguna Mountains skipper	Cleveland's horkelia ( <i>Horkelia clevelandii</i> ), sticky cinquefoil ( <i>Drymeallia glandulosa</i> )				
Lange's metalmark butterfly	naked stemmed buckwheat ( <i>Eriogonum nudum</i> )				
lotis blue butterfly	seaside bird's foot trefoil ( <i>Hosaekia gracilis</i> )				
Mission blue butterfly	lupine ( <i>Lupinus spp.</i> )				
Myrtle's silverspot butterfly	blue violet				
Oregon silverspot butterfly	blue violet				
Palos Verdes blue butterfly	Santa Barbara milkvetch ( <i>Astragalus trichopodus</i> ); common deerweed ( <i>Acmispon glaber</i> )				
San Bruno elfin butterfly	broadleaf stonecrop ( <i>Sedum spathulifolium</i> ), manzanita ( <i>Arctostaphylos spp.</i> ); huckleberry ( <i>Vaccinium spp.</i> )				
Smith's blue butterfly	seacliff buckwheat, seaside buckwheat ( <i>Eriogonum latifolium</i> )				
Quine checkerspot butterfly	dwarf plantain, purple owl's clover				

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 Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p><b>Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)</b></p> <p>If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>▪ To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment activities will not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species.</li> </ul>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	N/A	N/A	N/A



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>To avoid and minimize impacts to Casey's June beetle, Delhi Sands flower-loving fly (<i>Rhaphiomidas terminates abdominalis</i>), Delta green ground beetle (<i>Elaphrus viridis</i>), Morro shoulderband snail, Ohlone tiger beetle (<i>Cicindela ohlone</i>), and Trinity bristle snail, treatment activities will not occur within habitat in the range of these species that is deemed suitable by a qualified RPF or biologist with familiarity of the species.</li> </ul> <p>If the project proponent cannot implement the measures above to avoid mortality, injury or disturbance to listed beetles, flies, grasshoppers, and snails, or degradation of suitable habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p>				
<p><b>Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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).</li> <li>▪ 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).</li> </ul> <p><b>CESA and ESA Listed Species.</b> 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.</p> <p><b>Other Special-status Species.</b> 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</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p> <p>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.</p>				
<p><b>Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)</b></p> <p>The project proponent will implement the following measure if treatment activities are planned within the range of desert bighorn sheep, peninsular bighorn sheep, Sierra Nevada bighorn sheep, or pronghorn:</p> <ul style="list-style-type: none"> <li>▪ Prescribed herbivory activities will be prohibited within a 14-mile buffer around suitable habitat for any species of bighorn sheep within the range of these species consistent with the more stringent recommendations in the Recovery Plan for Sierra Nevada bighorn sheep (USFWS 2007).</li> </ul>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>Prescribed herbivory activities will be avoided within the range of pronghorn where feasible (where this range does not overlap with the range of any species of bighorn sheep).</li> </ul>				
<p><b>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>Reference the <i>Manual of California Vegetation</i>, Appendix 2, Table A2, <i>Fire Characteristics</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>) 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.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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 <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>). 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.</li> <li>▪ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).</li> <li>▪ 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).</li> </ul>				



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>▪ 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 <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>).</li> <li>▪ 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.</li> </ul> <p>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</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>implementation report (referred to by CAL FIRE as a Completion Report).</p> <p>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.</p> <p>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.</p>				
<p><b>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</b></p>	<p>Initial Treatment: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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:</p> <ul style="list-style-type: none"> <li>▪ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by:                             <ul style="list-style-type: none"> <li>- restoring sensitive natural community or oak woodland functions and acreage within the treatment area;</li> <li>- 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</li> <li>- 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.</li> </ul> </li> <li>▪ 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:                             <ol style="list-style-type: none"> <li>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.</li> <li>2. For restoring or enhancing habitat within the treatment area or outside of the</li> </ol> </li> </ul>	<p><b>Treatment Maintenance:</b> <b>N</b></p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p> <p>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.</p>				
<p><b>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</b></p> <p>If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:</p> <ul style="list-style-type: none"> <li>▪ Compensate for unavoidable losses of riparian habitat acreage and function by: <ul style="list-style-type: none"> <li>- restoring riparian habitat functions and acreage within the treatment area;</li> <li>- restoring degraded riparian habitat outside of the treatment area;</li> <li>- purchasing riparian habitat credits at a CDFW-approved mitigation bank; or</li> <li>- 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.</li> </ul> </li> <li>▪ 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: <ol style="list-style-type: none"> <li>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</li> </ol> </li> </ul>	<p><b>Initial Treatment: N</b></p> <p><b>Treatment Maintenance: N</b></p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<p>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.</p> <p>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.</p> <p>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.</p>				
<p><b>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</b></p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> <li>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.</li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul style="list-style-type: none"> <li>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).</li> </ul>				
<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Within this buffer, herbicide application is prohibited.</li> <li>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.</li> <li>Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:                         <ul style="list-style-type: none"> <li>No special-status species are present in the wetland habitat</li> <li>The wetland habitat function would be maintained.</li> </ul> </li> </ul>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p><b>Prior-During</b></p>	<p><b>SCC Parks</b></p>	<p><b>SCC Parks</b></p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>- The prescribed burn is within the normal fire return interval for the wetland vegetation types present</li> <li>- Fire containment lines and pile burning are prohibited within the buffer</li> <li>- No fire ignition (nor use of associated accelerants) will occur within the wetland buffer</li> </ul>				
<p><b>Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>▪ <b>Retain Known Nursery Sites.</b> 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</li> <li>▪ <b>Establish Avoidance Buffers.</b> 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.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<b>Greenhouse Gas Emissions</b>				
<p><b>Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns</b></p> <p>When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018):</p> <ul style="list-style-type: none"> <li>▪ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;</li> <li>▪ reduce the total area burned through mosaic burning;</li> <li>▪ burn when fuels have a higher fuel moisture content;</li> <li>▪ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and</li> <li>▪ schedule burns before new fuels appear.</li> </ul> <p>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.</p> <p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<b>Hazardous Materials, Public Health and Safety</b>				
<p><b>Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites</b></p> <p>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 (<a href="https://www.envirostor.dtsc.ca.gov/public/">https://www.envirostor.dtsc.ca.gov/public/</a>) 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.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p>	<p>Prior</p>	<p>SCC Parks</p>	<p>SCC Parks</p>

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# **Attachment B**

## Project-Specific CEQA Findings and Statement of Overriding Considerations





## INTRODUCTION

Santa Clara County Parks, referred to herein as "Project Proponent," in the exercise of its independent judgment, makes and adopts the following findings regarding its decision to approve the Sanborn and Upper Stevens Creek County Parks Forest Health Plan, referred to herein as "vegetation treatment project," within the scope of the California Vegetation Treatment Program (CalVTP). This document has been prepared in accordance with the California Environmental Quality Act (Pub. Resources Code, Sections 21000 et seq.) (CEQA) and the CEQA Guidelines (Cal. Code Regs., Tit. 14, Sections 15000 et seq.).

## STATUTORY REQUIREMENTS FOR FINDINGS

Public Resources Code section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The same section provides that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." (Pub. Resources Code, Section 21002.) Section 21002 goes on to provide that "in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The mandate and principles announced in Public Resources Code section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. (See Pub. Resources Code, Section 21081, subd. (a); CEQA Guidelines, Section 15091, subd. (a).) For each significant environmental effect identified in an EIR for a project, the approving agency must issue a written finding reaching one or more of three permissible conclusions:

- (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

(CEQA Guidelines, Section 15091, subd. (a); Pub. Resources Code, Section 21081, subd. (a).) Public Resources Code section 21061.1 defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors." (See also *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 565.)

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a Statement of Overriding Considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, Sections 15093, 15043, subd. (b); see also Pub. Resources Code, Section 21081, subd. (b).) The California Board of Forestry and Fire Protection (the Board), adopted Findings and a Statement of Overriding Considerations on December 30, 2019.

Here, as explained in the Board's Findings and the Draft Program Environmental Impact Report (Draft PEIR) and the Final PEIR (collectively, the "PEIR"), the CalVTP would result in significant and unavoidable environmental effects to the following: Aesthetics; Air Quality; Archaeological, Historical, and Tribal Cultural Resources; Biological Resources; Greenhouse Gas Emissions; Transportation; and Public Services, Utilities, and Service Systems. For reasons set forth in

the Board's Statement of Overriding Considerations, however, the Board determined that overriding economic, social, and other considerations outweigh the significant, unavoidable effects of the CalVTP.

When a responsible agency approves a vegetation treatment project using a within the scope finding for all environmental impacts, it must adopt its own CEQA findings pursuant to Section 15091 of the State CEQA Guidelines, and if needed, a statement of overriding considerations, pursuant to Section 15093 of the State CEQA Guidelines. (See CEQA Guidelines section 15096(h).) According to case law, a responsible agency's findings need only address environmental impacts "within the scope of the responsible agency's jurisdiction." (*Riverwatch v. Olivenhain Municipal Water District* (2009) 170 Cal.App.4th 1186, 1202.) Although each responsible agency must adopt its own findings, such agencies have the option of reusing, incorporating, or adapting all or part of the findings adopted by the Board for the CalVTP PEIR to meet the agency's own requirements to the extent the findings are applicable to the proposed vegetation treatment project. The following document sets forth the required findings for an agency's project-specific approval that relies on and implements the CalVTP PEIR.

The Project Proponent adopts these findings to document its exercise of its independent judgment regarding the potential environmental effects analyzed in the PEIR and to document its reasoning for approving the vegetation treatment project under the CalVTP in spite of these effects.

## BACKGROUND AND PROJECT DESCRIPTION

Santa Clara County Parks proposes to implement the Forest Health Plan, and more specifically, implement the recommended projects identified in Figures 12 and 13 in Chapter 7 of the Forest Health Plan. The Forest Health Plan proposes to implement vegetation treatment activities on approximately 1,188 acres within Sanborn County Park and approximately 179 acres within Upper Stevens Creek County Park, for a total of 1,367 treatment acres. The project is composed of recommended treatment areas identified in the FHP and approximately 268 acres (Treatment Areas 6A, 6B and 6C) that are grant funded through CAL FIRE's California Climate Investments (CCI) Forest Health Grant Program and would be implemented first. Some of these granted funded treatment acres overlap with the recommended treatment areas identified in the FHP. As such, actual treatment acres are a total of 1,109 acres.

Recommended projects identified in the Forest Health Plan are intended to reduce flammable vegetation; improve environmental conditions (e.g., forest health); provide defensible space to existing and proposed campgrounds; and provide strategic locations where firefighting ground and air resources can gain access and provide firefighters the ability to safely reduce the intensity of, slow down, or stop the spread of a wildfire that may threaten the area. This would be achieved by reducing, thinning, or removing mature fuel and dead/downed fuels, creating defensible space buffers and shaded fuel breaks along primary and secondary evacuation routes. Vegetation treatments would be implemented using manual and mechanical treatments, as well as prescribed burning.

## ENVIRONMENTAL REVIEW PROCESS

The Project Proponent followed the evaluation and reporting process outlined in the PSA and required under the CalVTP.

On July 6, 2022, Project Proponent submitted to CAL FIRE the required information regarding this project when it began preparing the PSA. The submittal included:

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

Upon adoption of these findings and approval of the project, Project Proponent will submit this completed PSA and associated geospatial data to CAL FIRE at the time a Notice of Determination is filed. The submittal will include the following:

- ▶ The completed PSA Environmental Checklist;
- ▶ The 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)

As required under the CalVTP, Project Proponent will submit the following information to CAL FIRE after implementation of the treatment:

- ▶ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction)
- ▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes
  - Size of treated area (typically acres);
  - Treatment types and activities;
  - Dates of work;
  - A list of the SPRs and mitigation measures that were implemented; and
  - 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.

## RECORD OF PROCEEDINGS

In accordance with Public Resources Code Section 21167, subdivision (e), the record of proceedings for the Project Proponent's decision to approve the vegetation treatment project under the CalVTP includes the following documents at a minimum:

- ▶ The certified Final PEIR for the CalVTP, including the Draft PEIR, responses to comments on the Draft PEIR, and appendices;
- ▶ All recommendations and findings adopted by the Board in connection with the CalVTP and all documents cited or referred to therein;
- ▶ All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the treatment project prepared by the Project Proponent, consultants to the Project Proponent, or responsible or trustee agencies with respect to the Project Proponent's compliance with the requirements of CEQA and with respect to the Project Proponent's action on the CalVTP;
- ▶ Matters of common knowledge to the Project Proponent, including but not limited to federal, state, and local laws and regulations;
- ▶ Any documents expressly cited in these findings, in addition to those cited above; and
- ▶ Any other materials required for the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

Pursuant to CEQA Guidelines section 15091, subdivision (e), the documents constituting the record of proceedings are available for review during normal business hours at Santa Clara County Parks, 298 Garden Hill Drive, Los Gatos, California 95032. The custodian of these documents is Michael Rhoades, Program Manager.

## MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP) was adopted by the Board for the CalVTP, and the applicable mitigation measures for this treatment project have been identified in the PSA. The Project Proponent will use the MMRP to track compliance with the CalVTP mitigation measures. The MMRP will remain available for public review during the compliance period. The Final MMRP is attached to and is approved in conjunction with the approval of the treatment project and adoption of these Findings.

## FINDINGS FOR DETERMINATIONS OF LESS THAN SIGNIFICANT

The Project Proponent has reviewed and considered the information in the Final PEIR for the CalVTP addressing potential environmental effects, proposed mitigation measures, and alternatives. The Project Proponent, relying on the facts and analysis in the Final PEIR and the treatment project PSA, which were presented to the Santa Clara County Parks Board of Supervisors and reviewed and considered prior to any approvals, concurs with the conclusions of the Final PEIR and the treatment project PSA regarding the potential environmental effects of the CalVTP and the treatment project.

The Project Proponent concurs with the conclusions in the Final PEIR and treatment project PSA that all of the following impacts will be less than significant:

### AESTHETICS AND VISUAL RESOURCES

- ▶ 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-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

### AGRICULTURAL AND FORESTRY RESOURCES

- ▶ Impact AG-1: Directly Result in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use

### AIR QUALITY

- ▶ Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk
- ▶ Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk
- ▶ Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust



## ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

- ▶ Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources
- ▶ Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource
- ▶ Impact CUL-4: Disturb Human Remains

## BIOLOGICAL RESOURCES

- ▶ Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife
- ▶ Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources
- ▶ Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan

## GEOLOGY, SOILS, AND MINERAL RESOURCES

- ▶ Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil
- ▶ Impact GEO-2: Increase Risk of Landslide

## GREENHOUSE GAS EMISSIONS

- ▶ Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs

## ENERGY RESOURCES

- ▶ Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy

## HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

- ▶ Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials
- ▶ Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides

## HYDROLOGY AND WATER QUALITY

- ▶ 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-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-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-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-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area

## LAND USE AND PLANNING, POPULATION AND HOUSING

- ▶ Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation
- ▶ Impact LU-2: Induce Substantial Unplanned Population Growth

## NOISE

- ▶ Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation
- ▶ Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities

## RECREATION

- ▶ Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas

## TRANSPORTATION

- ▶ 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-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses

## PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

- ▶ Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs
- ▶ Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste

## WILDFIRE

- ▶ Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire
- ▶ Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides

## CUMULATIVE

- ▶ Agriculture and Forestry Resources
- ▶ Biological Resources
- ▶ Geology, Soils, Paleontology, and Mineral Resources
- ▶ Energy Resources
- ▶ Hazardous Materials, Public Health and Safety
- ▶ Hydrology and Water Quality
- ▶ Population and Housing

- ▶ Noise
- ▶ Recreation
- ▶ Wildfire

## SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The PEIR identified a number of significant and potentially significant environmental effects (or impacts) that the CalVTP will contribute to or cause. The Board determined that some of these significant effects can be fully avoided through the application of feasible mitigation measures. Other effects, however, cannot be avoided by the adoption of feasible mitigation measures or alternatives and thus will be significant and unavoidable. For reasons set forth in Section 10.2 of the Board's Findings and Statement of Overriding Considerations, however, the Board determined that overriding economic, social, and other considerations outweigh the significant, unavoidable effects of the CalVTP.

The Board adopted the findings required by CEQA for all direct and indirect significant impacts. The findings provided a summary description of each impact, described the applicable mitigation measures identified in the PEIR and adopted by the Board, and stated the Board's findings on the significance of each impact after imposition of the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the Final PEIR; and the Board incorporated by reference into its findings the discussion in those documents supporting the Final PEIR's determinations. In making those findings, the Board ratified, adopted, and incorporated into the findings the analyses and explanations in the Draft PEIR and Final PEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions were specifically and expressly modified by the findings.

Not every individual treatment project will have all of the significant environmental impacts that the CalVTP was determined to contribute to or cause. Additionally, some of the environmental impacts predicted by the CalVTP PEIR to be significant and unavoidable or less than significant after mitigation may be determined in a PSA to be less severe for an individual treatment project than determined in the statewide PEIR. The impacts and mitigation measures identified in Sections 8.1 and 8.2 below reflect the conclusions of the PSA by indicating which of the CalVTP's impacts that this treatment project will contribute to or cause. By indicating the project-specific effects of this treatment project as follows, the Project Proponent's decisionmaker or decisionmaking body is hereby making the required findings under CEQA regarding the application or feasibility of mitigation measures to reduce those impacts.

## FINDINGS FOR IMPACTS MITIGATED TO LESS THAN SIGNIFICANT

The Project Proponent finds that changes or alterations have been required in, or incorporated into, the treatment project which avoid or substantially lessen the significant environmental effects indicated below, as identified in the Final PEIR and the PSA. Implementation of the mitigation measures indicated below to be applicable to the treatment project, which have been required or incorporated into the project, will reduce these impacts to a less than significant level. The Project Proponent hereby directs that these mitigation measures be adopted.

## BIOLOGICAL RESOURCES

- Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications
  - Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA
  - Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA
  - Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants

- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Tree-Nesting and Cavity-Nesting Wildlife)
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Shrub-Nesting Wildlife)
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Ground-Nesting Wildlife)
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Burrowing and Denning Wildlife)

- Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
- Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
- Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
- Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
- Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
- Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Insects and Other Terrestrial Invertebrates)
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)
  - Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)
  - Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)
  - Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Bats)
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands



- Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Ungulates)
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Fish and Aquatic Invertebrates (in wetlands, vernal pools))
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
  - Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Amphibians and Reptiles (in wetlands, vernal pools, associated riparian))
  - Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat

- Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands
- Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-4: Substantially Affect State or Federally Protected Wetlands
  - Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands
- Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries
  - Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites

## HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

- Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites
  - Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites

## FINDINGS FOR SIGNIFICANT AND UNAVOIDABLE IMPACTS

The CalVTP PEIR determined that some impacts of the program would be significant and unavoidable, even after implementation of all feasible mitigation. The Project Proponent finds that the treatment project would contribute to or cause the following significant and unavoidable impacts as indicated. Incorporating and implementing the following mitigation measures indicated to be applicable to the treatment project will reduce the severity of this impact, but not to a less-than-significant level. The Project Proponent hereby directs that these mitigation measures be adopted. The Project Proponent therefore finds that changes or alterations have been required in, or incorporated into, the treatment project that will substantially lessen, but not avoid, the significant environmental effect as identified in the PEIR and PSA.

The Project Proponent finds that fully mitigating these impacts are not feasible; there are no feasible mitigation measures beyond the mitigation measures indicated below to reduce these impacts. [Alternative to preceding sentence: The Project Proponent has reviewed any suggested mitigation measures and finds these suggestions infeasible.] These impacts will remain significant and unavoidable. The Project Proponent concludes, however, that the benefits of the CalVTP and the vegetation treatment project outweigh the significant unavoidable impacts of the Program and treatment project, as set forth in the Board's Statement of Overriding Considerations the Project Proponent's own Statement of Overriding Considerations, if any].

## AESTHETICS AND VISUAL RESOURCES

- 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
  - Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks

## AIR QUALITY

- Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that Would Exceed CAAQS Or NAAQS and Conflict with Regional Air Quality Plans
  - Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques
- Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk
  - No feasible mitigation is available.
- Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning
  - No feasible mitigation is available.

## ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

- Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources
  - Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

## BIOLOGICAL RESOURCES

- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Insects and Other Terrestrial Invertebrates - Bumble Bees)
  - Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)

## GREENHOUSE GAS EMISSIONS

- Impact GHG-2: Generate GHG Emissions through Treatment Activities
  - Mitigation Measure GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns

## TRANSPORTATION

- Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP
  - No feasible mitigation is available.

## PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

- Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity
  - No feasible mitigation is available.

## CUMULATIVE

### Aesthetics

- Cumulative Aesthetics Impact related to Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway
  - Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks

### Air Quality

- Cumulative Air Quality Impact related to On-Road Vehicle and Off-Road Equipment Exhaust Emissions
  - Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques

### Archaeological, Historical, and Tribal Cultural Resources

- Cumulative Archaeological, Historical, and Tribal Cultural Resources Impact related to Inadvertent Discoveries of Unique Archaeological Resources
  - Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

### Biological Resources

- Cumulative Biological Resources Impact related to Bumble Bees
  - Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)

### Transportation

- Cumulative Transportation Impact related to Vehicle Miles Travelled
  - No feasible mitigation is available.

### Public Services, Utilities and Service Systems

- Cumulative Public Services, Utilities, and Service Systems Impact related to Disposal of Biomass
  - No feasible mitigation is available.

# STATEMENT OF OVERRIDING CONSIDERATIONS<sup>1</sup>

As set forth in the Board's adopted Findings, the Board determined that the CalVTP will result in significant adverse environmental effects that cannot be avoided even with the adoption of all feasible mitigation measures, and there are no feasible project alternatives that would mitigate or substantially lessen the impacts. Despite these effects, however, the Board, in accordance with CEQA Guidelines Section 15093, chose to approve the CalVTP because, in its view, the benefits to life, property, and other resources, and the other benefits of the CalVTP, will render the significant effects acceptable.

In the Board's judgment, the CalVTP and its benefits outweigh its unavoidable significant effects. The Board's Findings were based on substantial evidence in the record. The Board's Statement of Overriding Considerations identified the specific reasons why, in the Board's judgment, the benefits of the CalVTP as approved outweigh its unavoidable significant effects.

Exercising its independent judgment and review, the Project Proponent concurs that the benefits of the CalVTP and the treatment project outweigh the significant environmental effects and hereby incorporates by reference and adopts the Board's Statement of Overriding Considerations for the CalVTP.

Any one of the reasons listed in the Statement of Overriding Considerations is sufficient to justify approval of the treatment project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the Project Proponent would stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this section, and the documents found in the Record of Proceedings, which are described and defined in Section 5, above.

- ▶ The CalVTP will reduce dire risks to life, property, and natural resources in California.
- ▶ The CalVTP reflects the most current and commonly accepted science and conditions in California and allows for adaptation in response to potential evolution and changes in science and conditions.
- ▶ The CalVTP reflects the Board's and CAL FIRE's goals. The CalVTP will help the Board and CAL FIRE achieve their central goals for reducing and preventing the impacts of fire in the state, as outlined in the *2018 Strategic Fire Plan for California*. The CalVTP will help to establish a natural environment that is more resilient and built assets that are more resistant to the occurrence and effects of wildland fire.
- ▶ The CalVTP will help implement Executive Orders, including:
  - EO B-42-17: Governor Brown's order issued to bolster the state's response to unprecedented tree die-off through further expediting removal of millions of dead and dying trees across the state;
  - EO B-52-18: Governor Brown's order to improve forest management and restoration, provide regulatory relief, and reduce barriers for prescribed fire; and
  - EO N-05-19: Governor Newsom's order directing CAL FIRE to recommend immediate-, medium-, and long-term actions to help prevent destructive wildfires.
- ▶ The Board is required by law to comply with SB 1260, signed into law by Governor Brown in February 2018, which improves California forest management practices to reduce the risk of wildfire in light of the changing climate and includes provisions for the CalVTP PEIR to serve as the programmatic CEQA coverage for prescribed burns within the SRA. The CalVTP will bring the Board into compliance with these requirements.

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<sup>1</sup> If the PSA indicates that the project proponent's treatment project will not contribute to or cause any of the significant and unavoidable impacts determined in the PEIR, the proponent need not adopt a statement of overriding considerations.



- ▶ The Board is required by law to comply with SB 632, signed into law by Governor Newsom in October 2019, which requires the Board to certify a Final PEIR, pursuant to CEQA, for the vegetation treatment program filed with the State Clearinghouse under Number 2019012052 in January 2019. The CalVTP will bring the Board into compliance with this requirement.
- ▶ The CalVTP will help to meet California's GHG emission goals consistent with the California Forest Carbon Plan, California's 2017 Climate Change Scoping Plan, Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada, and California 2030 Natural and Working Lands Climate Change Implementation Plan.



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# **Attachment C**

## Cultural Resources Survey Report



*A cultural resource evaluation was carried out to determine the presence or absence of any significant cultural resources, in accordance with SPRs CUL-1 through CUL-4. The Archaeological Assessment completed for this project is exempt from the Public Records Act. Section 3.4 of the Project Specific Analysis provides an overview of the Archaeological, Historical, and Tribal Cultural Resources findings and potential effects from implementation of the Forest Health Plan. Descriptions and analysis in this section are based on information documented in the Archaeological Assessment and information provided by the California Native American Heritage Commission (NAHC), Northwest Information Center (NWIC), National Register of Historic Places (NR), California Register of Historical Resources (CR), California Historical Landmarks (CHL) list, California Points of Historical Interest (CPHI) list, California State Historic Resources Inventory (HRI), the results of Native American outreach, and a pedestrian survey of the site conducted by Dudek.*





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# **Attachment D**

## Biological Technical Memo



## MEMORANDUM

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**To:** Shelan Zuhdi, Santa Clara County Parks and Recreation Department

**From:** Emily Scricca and Anna Touchstone, Dudek

**Subject:** Biological Technical Memorandum, Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project

**Date:** May 19, 2023

**cc:** Matt Ricketts, Dudek  
Dana Link-Herrera, Dudek

**Attachments:** Figure 1 – Project Location  
Figure 2 – Project Site  
Figures 3-1–3-3 – Proposed Project  
Figures 4-1–4-3 – Vegetation Communities and Potentially Jurisdictional Aquatic Resources  
Figures 5-1–5-3 – Biological Resources – CNDDDB Occurrences and Wildlife Observations  
Attachment A – Database Searches  
Attachment B – Special-Status Plant Species Potential to Occur  
Attachment C – Special-Status Wildlife Species Potential to Occur  
Attachment D – Representative Site Photographs  
Attachment E – Plant Species Compendium  
Attachment F – Wildlife Species Compendium  
Attachment G – California Department of Fish and Wildlife Comments

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This technical memorandum summarizes the results of a biological resources assessment conducted by Dudek biologists for the Santa Clara County Parks Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project (Project ID 2022-17) (Project), near Saratoga and Los Gatos, Santa Clara County, California. The Project is being proposed by the Santa Clara County Parks and Recreation Department to implement the Sanborn and Upper Stevens Creek County Parks Forest Health Plan, which recommends vegetation treatment activities on approximately 1,422 acres within Sanborn and Upper Stevens Creek County Parks to reduce wildfire risk and achieve other forest health benefits. The Project has been evaluated for California Environmental Quality Act (CEQA) compliance as an “activity” covered by the California Vegetation Treatment Program Program Environmental Impact Report (PEIR) (CBFFP 2019). The PEIR provides guidelines for impact assessment under CEQA disciplines, including biological resources. This memorandum provides a brief overview of the Project, a summary of the methods used to conduct the assessment, a description of existing conditions and assessment results, and recommendations for implementing PEIR requirements and mitigation measures.

# 1 Introduction

## 1.1 Project Description

Santa Clara County Parks proposes to implement the Forest Health Plan, and more specifically, implement the recommended projects identified in Figures 12 and 13 in Chapter 7 of the Forest Health Plan. The Forest Health Plan proposes to implement vegetation treatment activities on approximately 1,006 acres within Sanborn County Park and approximately 103 acres within Upper Stevens Creek County Park, for a total of 1,109 treatment acres.

Recommended projects identified in the Forest Health Plan are intended to reduce flammable vegetation; improve environmental conditions (e.g., forest health); provide defensible space to existing and proposed facilities and provide strategic locations where the wildfires can be slowed or stopped. This would be achieved by reducing, thinning, or removing mature fuel and dead/downed fuels, creating defensible space buffers and shaded fuel breaks along primary and secondary evacuation routes. Vegetation treatments would be implemented using manual and mechanical treatments, as well as prescribed burning.

## 1.2 Project Location

The Project site is within the Sanborn and Upper Stevens Creek County Parks in Santa Clara County. These parks are approximately 14 miles west of San Jose in the Santa Cruz Mountain Range. Sanborn Park is situated between Skyline Boulevard (State Route 35) to the west and the City of Saratoga to the east. Upper Stevens Creek Park is approximately 7 miles northwest of Sanborn County Park. Both parks are within a network of adjacent open spaces and preserves. Upper Stevens Creek Park is bordered by Monte Bello Open Space Preserve to the north, Saratoga Gap Open Space Preserve to the south, and Long Ridge Open Space preserve to the west (Figure 1, Project Location, and Figure 2, Project Site). Both parks provide recreational opportunities such as multi-use trails, camping, and day use areas.

## 1.3 Project Characteristics

The recommended projects identified in the Forest Health Plan consist of shaded fuel breaks and ecological restoration treatment types, and would be implemented using mechanical and manual vegetation removal, and prescribed burning (pile and broadcast) treatment activities. Table 1 provides further details on the extent of each treatment type and treatment activity within the parks. Treatment activities would be implemented according to the best management practices identified in the Forest Health Plan. These strategic treatments would help to reduce fire intensity during wildfires in areas directly adjacent to recreational values and in areas where firefighting resources can safely engage in suppression operations.

### Access

Project employees and transport of equipment would use State Route 35, State Route 9, Sanborn Road, and Black Road to access Sanborn Park. Upper Stevens Creek Park can be accessed by Skyline Boulevard (State Route 35). No new roads are proposed. The Project would be accessed from public and Santa Clara County Parks roads. The Project would not include access agreements for private roads.



## Biomass Disposal

Biomass would be managed by mastication, chipping, and removal to regional composting or biomass processing facilities, or burned in air curtain burners or pile burning. In some cases, logs may be stored temporarily on site prior to transport to biomass facilities. Mulch will not exceed an average of 6 inches of depth, and the spreading of mulch will be avoided within Watercourse and Lake Protection Zone (WLPZ) areas in accordance with SPR HYD-4, and in any areas where mammal burrows were identified during implementation of SPR BIO-10 (Surveys for Special-Status Wildlife; specifically, surveys for special-status amphibian refugia).

## Equipment and Crews

Equipment needed to implement manual treatments would include hand-operated tools, such as chainsaws and pole saws, as well as trucks and personal vehicles for transport of crews and equipment. Chippers would be used to assist with manual treatments and would be staged on existing access roads, outside of steep-slope areas. For mechanical treatments, the Project would involve use of hand crews in combination with heavy equipment, including masticators, feller-bunchers, skidders, track-mounted chippers and grinders. Crew sizes would vary based on land cover, terrain, and treatment activities. It is anticipated that crew sizes would range from 12 to 24 crew members per project. Crews would consist of private contractors, Santa Clara County Parks staff, local fire agencies, tribal groups, or combinations of existing labor sources. In some instances, California Department of Forestry and Fire Protection (CAL FIRE) crews and/or private contractors may be used for fuel break construction and maintenance. Local FireSafe councils may also implement fuel reduction projects.

## Project Timeline

Implementation of the recommended projects identified in the Forest Health Plan would occur over an approximately 10-year period, beginning as early as spring 2023.

## 1.4 Treatment Description

As shown in Figures 3-1 through 3-3, Proposed Project, and presented in Table 1, the Project is composed of multiple treatment areas. Treatment areas were identified due to varying conditions and to allow versatility of implementation based on site-specific requirements and conditions.

Treatments types proposed are consistent with the PEIR (CBFFP 2019) and include ecological restoration and fuel breaks, as follows:

- **Shaded Fuel Break Treatments.** Fuel breaks would consist of shaded fuel breaks around primary/secondary evacuation routes and other roads, existing and proposed campgrounds, recreational resources, and structures. No non-shaded (vegetation free) fuel breaks are proposed. Fuel breaks would increase the horizontal spacing between retained vegetation, increase the vertical separation between surface fuels and overstory tree canopies, and modify surface fuels (grasses, shrubs, debris) to reduce fire intensity and flame lengths. Recommended fuel breaks would vary in total width depending on terrain, vegetation, and proximity to developed uses, and may range from 20 to 400 feet.
- **Ecological Restoration Treatments.** Ecological restoration treatments would address overall forest health, increasing tree vigor, reducing susceptibility to pests and pathogens, increasing tolerance to drought and

climate change, and reducing the threat of high-severity wildfire. Treatments would consist of selective thinning and removal of mid- to large-diameter noncommercial trees affected by sudden oak death and/or large-diameter Douglas fir trees overtopping sensitive hardwood and brush species. The long-term goal is to return these forested stands to a condition with an increasingly diverse and regenerative forest, vigorous with larger trees, and increased the spacing between tree crowns and understory vegetation, through the use of prescribed fire as well as other vegetation management techniques. Selective thinning, treatment of understory vegetation (ladder fuels), removal of dead and dying trees, and control of invasive species (where applicable) would be integrated into treatment prescriptions.

The proposed treatment activities would be consistent with the PEIR and include manual treatments, mechanical treatments, and prescribed burning (pile and broadcast burning). Best management practices discussed in the Forest Health Plan would be implemented, as would Standard Project Requirements (SPRs) outlined in the PEIR.

- **Mechanical Treatments.** Mechanical treatments proposed under the Forest Health Plan include the use of masticators, tractors, chippers, grinders, skidder, and cable yarding systems.
- **Manual Treatments.** Manual treatments proposed under the Forest Health Plan include pruning, cutting, or removal of trees or other forest vegetation by hand or using hand-held equipment. Other hand-labor treatments would involve removing dead wood, piling material, lopping and scattering, and spreading chips/mulch. Where mechanized treatment is not feasible, handwork would be used to connect mechanically treated polygons in the highest priority areas.
- **Prescribing Burning Treatments.** Both pile and broadcast burning are proposed, as is use of an air curtain burner. It is anticipated that approximately 400 acres would be treated using pile or broadcast burning. A burn plan would be prepared for each controlled prescribed burn for broadcast burns. Pile burns would be located at or adjacent to treatment areas; they are not subject to a burn plan.

## 1.5 California Vegetation Treatment Program PEIR

The PEIR (CBFFP 2019) identified potential impacts to biological resources, as follows:

- **IMPACT BIO-1:** Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modification
- **IMPACT BIO-2:** Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modification
- **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-4:** Substantially Affect State or Federally Protected Wetlands
- **IMPACT BIO-5:** Interfere Substantially with Wildlife Movement or Impede use of Nurseries
- **IMPACT BIO-6:** Substantially Reduce Habitat or Abundance of Common Wildlife, Including Nesting Birds
- **IMPACT BIO-7:** Conflict with Local Policies or Ordinances Protecting Biological Resources
- **IMPACT BIO-8:** Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan

The PEIR includes several Standard Project Requirements (SPRs) designed to avoid and/or minimize the above-identified potential impacts. It also includes mitigation measures (MMs) to be implemented where impacts are still potentially significant after implementation of the SPRs. SPR BIO-1 requires data review and a

reconnaissance-level biological survey as the first steps to identifying potential impacts (CBFFP 2019). The following sections describe methods and results of the data review and reconnaissance-level survey, and provide recommendations for implementing the SPRs and MMs to ensure the Project does not result in significant impacts to biological resources.

**Table 1 Proposed Project Treatment Areas**

Map ID	Area	Project Name	Treatment Type	Treatment Activities	Park
9.842239574	01A	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
1.479493182	01B	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
14.65695307	01C	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
26.35143192	01D	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
19.66311927	01E	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
9.774791219	01F	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
9.605613121	01G	Skyline Boulevard Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
42.67615527	02	Table Mountain Christmas Tree Farm	Ecological Restoration	Mechanical, Manual	Upper Stevens Creek
8.687944617	03A	Charcoal Road-Table Mountain Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
38.89136568	03B	Charcoal Road-Table Mountain Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
0.718097708	04A	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
0.718097719	04B	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
0.628070782	04C	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
7.163833959	04D	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
5.20547116	04E	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
13.12953363	04F	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
1.575137313	04G	Defensible Space	Shaded Fuel Break	Mechanical, Manual	Sanborn
5.30339426	05A	Sanborn Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
33.05831567	05B	Sanborn Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
10.52052576	05C	Sanborn Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
5.18626208	06A*	Los Gatos Creek Watershed Collaborative Forest Health Grant – Area B – Santa Clara County Parks	Ecological Restoration/ Shaded Fuel Break	Manual	Sanborn
201.6065789	06B*	Los Gatos Creek Watershed Collaborative Forest Health Grant – Area B – Santa Clara County Parks	Ecological Restoration/ Shaded Fuel Break	Mechanical, Manual	Sanborn

**Table 1 Proposed Project Treatment Areas**

Map ID	Area	Project Name	Treatment Type	Treatment Activities	Park
61.38398761	06C*	Los Gatos Creek Watershed Collaborative Forest Health Grant – Area B – Santa Clara County Parks	Ecological Restoration/ Shaded Fuel Break	Mechanical, Manual	Upper Stevens Creek
25.30622433	07	Christensen Nursery – Future Camping	Shaded Fuel Break	Mechanical, Manual	Sanborn
36.16685703	07	Christensen Nursery – Future Camping – 100-foot Buffer	Shaded Fuel Break	Mechanical, Manual	Sanborn
6.553948044	08	Sanborn Walk-in Campground	Shaded Fuel Break	Mechanical, Manual	Sanborn
10.09796394	08	Sanborn Walk-in Campground – 100-foot Buffer	Shaded Fuel Break	Mechanical, Manual	Sanborn
312.1168442	09	Lake Ranch Res Wildfire Resiliency Project	Ecological Restoration	Mechanical, Manual	Sanborn
101.3565149	10	Primary and Secondary Evacuation Routes	Shaded Fuel Break	Mechanical, Manual	Sanborn
330.1196258	11	Lyndon Canyon Creek Wildfire Resiliency Project	Ecological Restoration	Mechanical, Manual	Sanborn
7.968178256	12	Black Road Shaded Fuel Break	Shaded Fuel Break	Mechanical, Manual	Sanborn
9.815362543	13	Christmas Tree Farm Fuels Reduction	Ecological Restoration	Mechanical, Manual	Sanborn

\* In some instances, treatment areas identified by the Los Gatos Creek Watershed Collaborative Forest Health Grant overlap with treatment areas previously identified in the Forest Health Plan. As such, areas in this table present some overlap. Total acres proposed for treatment activities equals approximately 1,109 acres.

## 2 Methods

SPR BIO-1 (Review and Survey Project-Specific Biological Resources) identifies sources to be consulted for the data review, the purposes of the reconnaissance-level survey, and steps to be taken based on the results of the data review and reconnaissance-level survey. This section describes the methods for the data review and reconnaissance-level survey conducted for the Project.

### 2.1 Data Review

SPR BIO-1 requires that the data review include “the biological resources setting, species and sensitive natural communities tables, and habitat information in [the] PEIR for the ecoregion(s) where the treatment will occur” and “the best available, current data for the area, including vegetation mapping data, species distribution/range information, California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans” (CBFFP 2019; CDFW 2022a; CNPS 2022a). In addition to reviewing the above source for the Project ecoregion (261A, Central California Coast), Dudek biologists reviewed the following databases:

- U.S. Fish and Wildlife Service’s (USFWS) Information for Planning and Consulting (IPaC) (USFWS 2022a)
- National Hydrography Dataset (USGS 2022)
- National Wetlands Inventory (USFWS 2022b)
- U.S. Department of Agriculture Natural Resources Conservation Service (USDA 2022)

Searches of the above-referenced databases were completed for the Mindego Hill and Castle Rock Ridge U.S. Geological Survey 7.5-minute quadrangles in which the Project site occurs, and the following surrounding quadrangles: Cupertino, Big Basin, and Los Gatos.

Dudek biologists also consulted the Santa Clara County Code of Ordinances Division (County of Santa Clara 2006) for policies and development standards that may apply to the Project, and consulted the County of Santa Clara’s Tree Removal in the Hillside Zoning District Ordinance (Section C16-6). In addition to conducting the data review, Dudek biologists coordinated with the California Department of Fish and Wildlife (CDFW) and USFWS with regard to the potential for the Project to affect resources entrusted to these agencies, such as species listed under the federal Endangered Species Act and California Endangered Species Act.

To determine lists of potentially occurring special-status plant and wildlife species, Dudek biologists first referred to PEIR Appendix BIO-3, Special-Status Species Tables (CBFFP 2019). The five-quad CNDDDB query (Attachment A, Database Searches) provided a list of species for further analysis. The final list of species that have potential to occur was determined based on factors such as details of range, elevation range, and habitat suitability (Attachment B, Special-Status Plant Species Potential to Occur, and Attachment C, Special-Status Wildlife Species Potential to Occur).



## 2.2 Reconnaissance-Level Survey

Following the data review, Dudek biologists Emily Scricca and Anna Touchstone conducted reconnaissance-level field surveys of the Project site to identify and describe existing biological resources, including natural vegetation communities, aquatic resources (e.g., wetlands), and sensitive natural resources, such as vegetation communities considered sensitive by state/federal resource agencies and habitat potentially supporting special-status plant and wildlife species. Existing vegetation and land cover mapping from the Sanborn-Skyline County Parks Interim Natural Resource Plan (Santa Clara County Parks 2012) was referenced in the field and boundaries were updated as needed based on observed conditions and review of aerial imagery signatures (Google Earth Pro 2022). Natural communities were mapped based on constituent species and membership rules as defined in the Manual of California Vegetation Online (CNPS 2022b), and were classified to the level necessary to determine CDFW sensitivity rankings (CDFW 2022b). Determinations for the potential occurrence of special-status species were based on a review of habitat types, soils, and elevation preferences, as well as the known geographic range of each species and nearby documented occurrences. Species were considered “not expected to occur” when the Project site was clearly outside the known geographic range of the species or when potential habitat was absent from the Project site.

Dudek biologists met with Santa Clara County Parks staff on May 31 (Sanborn) and June 3 (Upper Stevens Creek) to receive general tours of the treatment areas and discuss access routes. Following these initial visits, Dudek biologists were able to conduct the reconnaissance-level surveys independently. Table 2 provides the dates and weather conditions observed during the reconnaissance-level field surveys.

**Table 2. Survey Dates, Personnel, and Conditions**

Date/Time	Visit Type	Location	Personnel	Conditions
5/31/2022 9:00 AM – 1:00 PM	Access/Site Tour	Sanborn County Park	Emily Scricca, Park Staff	Not recorded
6/2/2022 9:30 AM – 3:50 PM	Reconnaissance-Level Survey	Sanborn County Park	Emily Scricca, Anna Touchstone	68–80°F, 20–30% cloud cover, 3–5 mph winds
6/3/2022 10:00 AM – 1:30 PM	Access/Site Tour, Reconnaissance-Level Survey	Upper Stevens Creek County Park	Emily Scricca, Anna Touchstone, Park Staff	73–82°F, 10–20% cloud cover, 3–5mph winds, hazy
6/30/2022 9:00 AM – 2:00 PM	Reconnaissance-Level Survey	Sanborn County Park	Emily Scricca	56–72°F, 0% cloud cover, 3–5 mph winds

Reconnaissance-level site visits were conducted on foot and from vehicles to ensure visual coverage of the Project site. The survey was conducted within all accessible parts of the Project site to the level necessary to identify and describe existing biological resources. Biologists walked to all areas that were not visible from a vehicle using existing Parks trails. ESRI Collector on a mobile device and a Trimble® R1 GNSS Receiver with submeter accuracy with an overlay of the treatment area boundaries were used to record any sensitive biological resources. Representative photographs are included in Attachment D.

The surveys focused on biological resources covered in the PEIR impact analysis (Impacts BIO-1 through BIO-8, listed above), but also considered the potential for impacts not addressed in the PEIR. All plant and wildlife species observed during the survey were recorded. Plant species were identified to the lowest taxonomic group possible.

Nomenclature for plant species follow the Jepson Manual, Vascular Plants of California, Second Edition (Jepson Flora Project 2022). Wildlife species detected by sight, calls, tracks, scat, or other signs were recorded into a field notebook. The Project site was scanned with and without binoculars to aid in the identification of wildlife. Wildlife species not observed but expected to use the Project site were identified based on known habitat preferences and regional distribution. Full lists of plant and wildlife species observed during the reconnaissance-level field surveys are included in Attachment E, Plant Species Compendium, and Attachment F, Wildlife Species Compendium.

No formal wetland delineation or focused surveys for special-status plant or animal species were conducted. The field visit was sufficient to generally describe aquatic features on the Project site that could be subject to regulation by the U.S. Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board (RWQCB), and/or CDFW under Sections 404 of the federal Clean Water Act, the Porter-Cologne Water Quality Control Act, and Section 1600 of the California Fish and Game Code, respectively.

**Table 3. Sensitive Natural Communities within the Project Site**

Alliance	CaCode	CDFW CaCode/Association	State Rarity
<b>Bog and Marsh</b>			
Cattail marshes*	52.050.09	<i>Typha angustifolia</i> – <i>Typha latifolia</i> – <i>Typha domingensis</i> / <i>Schoenoplectus americanus</i>	–
Field horsetail – scouringrush horsetail – variegated scouringrush wet meadow	52.070.00	–	S3S4
<b>Chaparral</b>			
Chamise chaparral	37.101.19	<i>Adenostoma fasciculatum</i> – <i>Arctostaphylos manzanita</i>	Y
<b>Forest and Woodland</b>			
California bay forest and woodland	74.100.05	<i>Umbellularia California</i> – <i>Quercus agrifolia</i> / <i>Toxicodendron diversilobum</i> ( <i>Corylus cornuta</i> )	Y
Coast live oak woodland and forest	71.060.26	<i>Quercus agrifolia</i> – <i>Arbutus menziesii</i> – <i>Umbellularia californica</i>	S3
Douglas fir forest and woodland	82.200.50	<i>Pseudotsuga menziesii</i> – <i>Arbutus menziesii</i>	Y
Douglas fir forest and woodland	82.200.60	<i>Pseudotsuga menziesii</i> – <i>Quercus kelloggii</i>	Y
Douglas fir forest and woodland	82.300.03	<i>Pseudotsuga menziesii</i> – <i>Quercus chrysolepis</i>	S3?
Douglas fir – tanoak forest and woodland	82.500.04	<i>Pseudotsuga menziesii</i> – <i>Notholithocarpus densiflorus</i> – <i>Umbellularia californica</i> / <i>Toxicodendron diversilobum</i>	Y
Redwood forest and woodland	86.100.00	–	S3
Redwood forest and woodland	86.100.14	<i>Sequoia sempervirens</i> – <i>Acer macrophyllum</i> – <i>Umbellularia californica</i>	S3
<b>Riparian</b>			
Bigleaf maple forest and woodland	61.450.01	<i>Acer macrophyllum</i> /( <i>Rubus ursinus</i> )	Y

**Table 3. Sensitive Natural Communities within the Project Site**

Alliance	CaCode	CDFW CaCode/Association	State Rarity
Bigleaf maple forest and woodland	61.450.04	<i>Acer macrophyllum</i> - <i>Pseudotsuga menziesii</i> / <i>Corylus cornuta</i>	Y
Goodding’s willow – red willow riparian woodland and forest	61.211.05	<i>Salix gooddingii</i> – <i>Salix laevigata</i>	Y
<b>Scrub</b>			
Coyote brush scrub	32.060.21	<i>Baccharis pilularis</i> /( <i>Nassella pulchra</i> – <i>Elymus glaucus</i> – <i>Bromus carinatus</i> )	S3

**Notes:** CDFW = California Department of Fish and Wildlife  
 S4S3 = Apparently secure/vulnerable statewide; Y= Designated as being of S3 or rarer; S3 = Vulnerable statewide; ? = an inexact numeric rank due to insufficient data over the full expected range of the type, but existing information points to this rank (Master et. al. 2012)  
 \* Vegetation community that while not rare, is generally associated with aquatic features and thus constitutes high value for wildlife, and may be subject to the jurisdiction of CDFW.

### 3 Results

The data review and reconnaissance-level surveys identified several sensitive biological resources occurring or potentially occurring within the Project site that could be affected by vegetation treatment activities. A total of 15 CDFW sensitive natural communities were identified within the Project site (Table 3), as indicated by a state rarity ranking of S1–S3, or indicated as sensitive without a rarity ranking (CDFW 2022b). Additionally, oak woodland communities are considered sensitive under the PEIR (CBFFP 2019).

Several special-status plant and wildlife species also have potential to occur within the Project site (see Attachments B and C). Results of the CNDDDB and California Native Plant Society database searches identified 45 special-status plant species as occurring or potentially occurring in the Project vicinity. Of these, 30 were eliminated from further consideration due to a lack of suitable habitat or edaphic conditions (i.e., alkaline or serpentine soils), extent of habitat degradation within the Project site (e.g., regular mowing, presence of invasive species, previous disturbance), or the location of the Project site outside a species’ known range.

The 15 remaining species have at least a low potential to occur within the Project site based on the presence of suitable habitat types (Table 4).

**Table 4. Special-Status Plants with Potential to Occur**

Species	Status (Federal/ State/CRPR)	Vegetation Type			
		Valley and Foothill Grassland <sup>1</sup>	Chaparral Scrub or Woodland <sup>2</sup>	Coniferous Forest <sup>3</sup>	Riparian Woodland <sup>4</sup>
Anderson’s manzanita ( <i>Arctostaphylos andersonii</i> )	None/None/1B.2	—	X	X	—
Arcuate bush-mallow ( <i>Malacothamnus arcuatus</i> )	None/None/1B.2	—	X	—	—

**Table 4. Special-Status Plants with Potential to Occur**

Species	Status (Federal/ State/CRPR)	Vegetation Type			
		Valley and Foothill Grassland <sup>1</sup>	Chaparral Scrub or Woodland <sup>2</sup>	Coniferous Forest <sup>3</sup>	Riparian Woodland <sup>4</sup>
Bent-flowered fiddleneck ( <i>Amsinckia lunaris</i> )	None/None/1B.2	X	X	—	—
Chaparral ragwort ( <i>Senecio aphanactis</i> )	None/None/2B.2	—	X	—	—
Dudley’s lousewort ( <i>Pedicularis dudleyi</i> )	None/SR/1B.2	X	X	X	—
King’s Mountain manzanita ( <i>Arctostaphylos regismontana</i> )	None/None/1B.2	—	X	X	—
Loma Prieta hoita ( <i>Hoita strobilina</i> )	None/None/1B.1	—	X	—	X
Minute pocket moss ( <i>Fissidens pauperculus</i> )	None/None/1B.2	—	—	X	—
Most beautiful jewelflower ( <i>Streptanthus albidus</i> ssp. <i>peramoenus</i> )	None/None/1B.2	X	X	—	—
Sanford’s arrowhead ( <i>Sagittaria sanfordii</i> )	None/None/1B.2	—	—	—	X*
San Mateo woolly sunflower ( <i>Eriophyllum latilobum</i> )	FE/SE/1B.1	—	X	X	—
Santa Cruz clover ( <i>Trifolium buckwestiorum</i> )	None/None/1B.1	—	X	—	—
Western leatherwood ( <i>Dirca occidentalis</i> )	None/None/1B.2	—	X	X	X
White-flowered rein orchid ( <i>Piperia candida</i> )	None/None/1B.2	—	X	X	—
Woodland woollythreads ( <i>Monolopia gracilens</i> )	None/None/1B.2	X	X	X	—

**Notes:** Additional information is in Attachment B, Special-Status Plant Species Potential to Occur.

X = occurs; — = does not occur

**Status Legend:**

FE: Federally listed as endangered

SE: State listed as endangered

SR: State rare

California Rare Plant Rank (CRPR) 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere

.1 Seriously threatened in California (over 80% of 80% of occurrences threatened/high degree and immediacy of threat)

.2 Moderately threatened in California (20–80% occurrences threatened/moderate degree and immediacy of threat)

<sup>1</sup> Valley and foothill grassland vegetation in the Project site includes the non-native grasslands community, which is present intermittently throughout the Project site.

<sup>2</sup> Chaparral and cismontane woodland vegetation in the Project site includes the coyote brush scrub, chamise chaparral, canyon live oak forest and woodland, coast live oak woodland and forest, mixed oak forest and woodland, California bay forest, and woodland alliances, which are present in abundance throughout the Project site.

<sup>3</sup> Coniferous forest vegetation in the Project site includes the Douglas fir forest and woodland, Douglas fir-tanoak forest and woodland, and redwood forest and woodland alliances, which are present in abundance throughout the Project site.

- 4 Riparian woodland vegetation in the Project site includes Goodding’s willow–red willow riparian woodland and forest and bigleaf maple forest and woodland alliances, which are limited throughout the Project site.
- \* Sanford’s arrowhead occurs in marshes and swamps, which are present in the cattail marshes and field horsetail – scouring rush horsetail – variegated scouring rush wet meadow alliance, open water, and riverine and palustrine features of the Project site.

Results of the CNDDDB and USFWS IPaC database searches identified 31 special-status wildlife as occurring or potentially occurring within the Project site or vicinity. Of these, 12 species were eliminated from consideration due to the absence of suitable habitat within the Project site or the Project site’s location outside of the species’ known range.

The remaining 19 species were observed during the June 2022 field survey or determined to have at least a low potential to occur within the Project site based on the presence of suitable habitat (Table 5).

**Table 5. Special-Status Wildlife with Potential to Occur**

Species	Status (Federal/State)	Habitat Associations
<b>Amphibians</b>		
California giant salamander ( <i>Dicamptodon ensatus</i> )	None/SSC	Known from wet coastal forests and chaparral near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams, and occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.
California red-legged frog ( <i>Rana draytonii</i> )	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby, or emergent vegetation associated with deep, still, or slow-moving water; uses adjacent uplands.
Foothill yellow-legged frog – central coast DPS ( <i>Rana boylei</i> pop. 4)	FPT/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland.
Red-bellied newt ( <i>Taricha rivularis</i> )	None/SSC	Redwood forests (and sometimes other forest types) along coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Lives in terrestrial habitats, juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 kilometer to breed, typically in streams with moderate flow and clean rocky substrate.
Santa Cruz black salamander ( <i>Aneides flavipunctatus niger</i> )	None/SSC	Restricted to mesic forests in the fog belt of the outer Coast Range of San Mateo, Santa Cruz, and Santa Clara Counties. Mixed deciduous and coniferous woodlands and coastal grasslands. Occurs in moist streamside microhabitats and is found under rocks, talus, and damp woody debris.
<b>Birds</b>		
American peregrine falcon ( <i>Falco peregrinus anatum</i> )	FPD/FP, SCD	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, and croplands, especially where waterfowl are present.
Golden eagle ( <i>Aquila chrysaetos</i> )	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, and open desert rimrock terrain; nests in large trees and on cliffs in open areas, and forages in open habitats.

**Table 5. Special-Status Wildlife with Potential to Occur**

Species	Status (Federal/State)	Habitat Associations
Least Bell's vireo ( <i>Vireo belli pusillus</i> )	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.
Long-eared owl ( <i>Asio otus</i> )	BCC/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, and edges of coniferous forest; forages in nearby open habitats.
Marbled murrelet ( <i>Brachyramphus marmoratus</i> )	FT/SE	Nests in old-growth coastal forests; forages in subtidal and pelagic habitats.
Purple martin ( <i>Progne subis</i> )	None/SSC	Nests and forages in woodland habitats, including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region, often nests in weep holes under elevated freeways.
White-tailed kite ( <i>Elanus leucurus</i> )	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.
<b>Invertebrates</b>		
Crotch bumble bee ( <i>Bombus crotchii</i> )	SC	Inhabits open grassland and scrub habitats and is commonly associated with the following plant families: <i>Fabaceae</i> , <i>Apocynaceae</i> , <i>Asteraceae</i> , <i>Lamiaceae</i> , <i>Hydrophyloideae</i> , <i>Asclepiadoideae</i> , and <i>Boraginaceae</i> . Example food plants include the genera <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Phacelia</i> , and <i>Salvia</i> . Nests underground and overwinters in soft, disturbed soil. The flight period for queens occurs from late February to late October, peaking in early April and again in July. The flight period for workers/males occurs from late March through September, peaking in early July.
Western bumble bee ( <i>Bombus occidentalis occidentalis</i> )	SC	Inhabits meadows and grasslands and is commonly associated with plants that bloom from early February to late November, specifically plants in the following genera: <i>Cirsium</i> , <i>Erigonum</i> , <i>Solidago</i> , <i>Aster</i> , <i>Ceanothus</i> , <i>Centaurea</i> , and <i>Penstemon</i> . Nests primarily in underground cavities such as rodent burrows and occasionally aboveground in logs. Overwinters in the soil up to 2 inches from the surface. The flight period for queens occurs from early February to late November, peaking in late June and late September. The flight period for workers/males occurs from early April to early November, peaking in early August and early September.
<b>Mammals</b>		
Pallid bat ( <i>Antrozous pallidus</i> )	None/SSC	Grasslands, shrublands, woodlands, and forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in trees and human-made structures.



**Table 5. Special-Status Wildlife with Potential to Occur**

Species	Status (Federal/State)	Habitat Associations
Puma ( <i>puma concolor</i> )	None/SC	Scrubs, chaparral, riparian, woodland, and forest; rests in rocky areas and on cliffs and ledges that provide cover; most abundant in riparian areas and brushy stages of most habitats throughout California, except deserts.
Ringtail ( <i>Bassariscus astutus</i> )	None/FP	Mixed forests and shrublands near rocky areas or riparian habitats; forages near water and is seldom found more than 1 kilometer (0.62 miles) from a water source.
San Francisco dusky-footed woodrat ( <i>Neotoma fuscipes annectens</i> )	None/SSC	Forest habitats with a moderate canopy and moderate to dense understory.
Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> )	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels.
<b>Reptiles</b>		
San Francisco garter snake ( <i>Thamnophis sirtalis tetrataenia</i> )	FE/FP, SE	Wide range of habitats, including grasslands or wetlands adjacent to ponds, marshes, and sloughs.
Western pond turtle ( <i>Actinemys marmorata</i> )	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.

**Notes:** Additional information is in Attachment C, Special-Status Wildlife Species Potential to Occur.

**Status Legend:**

- FE: Federally listed as endangered
- FT: Federally listed as threatened
- FPT: Federally proposed for listing as threatened
- FPD: Federally proposed for delisting
- BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern
- FP: California Fully Protected Species
- SSC: California Species of Special Concern
- WL: California Watch List Species
- SE: State listed as endangered
- SC: State candidate for listing as threatened or endangered
- SCD: State candidate for delisting

Aquatic resources potentially subject to U.S. Army Corps of Engineers, RWQCB, and/or CDFW jurisdiction occur throughout the Project site. Jurisdictional aquatic resources may be regulated under the Clean Water Act, Porter-Cologne Water Quality Act, and/or Section 1602 of the California Fish and Game Code. Within Upper Stevens Creek County Park, runoff from the steep terrain is channeled into ephemeral drainages and ravines that flow northeast toward Stevens Creek, generally outside of the Project site. Within Sanborn County Park, numerous ephemeral, intermittent, and perennial drainages channel runoff from the rugged, sloping terrain northeast toward major tributary drainages to Saratoga Creek, including Booker Creek, Bonjetti Creek, McElroy Creek, Todd Creek, Aubry Creek, and Sanborn Creek. Portions of Bonjetti, Todd, Aubry, and Sanborn Creeks occur within the Project site. Lyndon Canyon Creek and its unnamed tributaries, portions of which occur within the Project site, drain the southern portion of Sanborn County Park in a southeasterly direction toward Lexington Reservoir. Lake Ranch Reservoir is an impoundment of Lyndon Canyon that collects runoff from the numerous surrounding drainages and supports perennial hydrology and adjacent wetland areas.

Two types of riparian habitat were identified within the Project site: bigleaf maple forest and woodland and Goodding's willow – red willow riparian woodland and forest. Riparian vegetation communities occurring along streams, ponds, rivers, and lakes are considered sensitive because of their high habitat value for native wildlife, and may be subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code.

## 3.1 Environmental Setting

The Project site occurs within the eastern extensions of the Santa Cruz Mountains, at elevations ranging from approximately 840 feet to 3,120 feet above mean sea level. Both Sanborn and Upper Stevens Creek County Parks are generally undeveloped and support mostly natural lands. Land uses include open space; picnic areas; recreational trails; and small sections of agriculture, such as former Christmas tree farms and native herb gardens. Several forest and woodland communities dominate the treatment areas, including several sensitive communities. In general, a mixture of coast live oak (*Quercus agrifolia*) and Douglas fir (*Pseudotsuga menziesii*) forest and woodland communities dominate the Project site, with areas of coast redwood (*Sequoia sempervirens*), broadleafed riparian trees, scrub, ornamental plantings, and grassland. Soils are variable and include sandy types, degraded siltstone and sandstone, and loamy and clay soils. Vegetation types and soils within each treatment area are described below.

### 3.1.1 Treatment Areas 01A, 01B, and 01C

Treatment Areas 01A, 01B, and 01C are part of the Skyline Boulevard Shaded Fuel Break Project located along the west and southwest sides of Upper Stevens Creek Park. These are 9.8-acre (01A), 1.5-acre (01B), and 14.7-acre (01C) parcels of vegetation that run northwest/southeast along Skyline Boulevard, along the eastern side of the road. Soils in these treatment areas are dominated by the Ben Lomond–Casrock complex, which is composed of slope alluvium derived from sandstone (USDA 2022). The Aptos Loam complex is also found in Treatment Areas 01A and 01C, primarily in a section of grassland, and is composed of residuum weathered from mudstone (USDA 2022). A small section of Ben Lomond–Felton soils complex can be found in the northwestern section of Treatment Area 01C, which contains siltstone derivatives (USDA 2022). None of these soil types are considered hydric soils or are known to support edaphic special-status plant species (i.e., the soils of these treatment areas are neither serpentine nor alkaline).

Vegetation communities in these treatment areas are from the Douglas fir forest and woodland alliance, which is dominated by Douglas fir and California bay (*Umbellularia californica*) in the canopy, and intermixed with coast live oak and other broadleafed tree species. Several coast redwood saplings and individual toyon (*Heteromeles arbutifolia*) shrubs are present along the roadway. Mixed oak forest and woodland is also prominent in these treatment areas, which is dominated by coast live oak and black oak (*Quercus kelloggii*) in the canopy, and intermixed with California bay and other broadleafed species. Small patches of wild oats and annual brome grassland are intermixed with the mixed oak forest and woodland, and composed of mostly wild oat (*Avena fatua*) and brome grasses (*Bromus* spp.). Coyote brush (*Baccharis pilularis*) and Scotch broom (*Cytisus scoparius*) were observed growing along the roadside. Vegetation communities occurring within Treatment Areas 01A and 01B are not identified as sensitive (CDFW 2022b).

Vegetation communities within Treatment Area 01C consist of two associations of the Douglas fir forest and woodland alliance: the *Pseudotsuga menziesii* – *Umbellularia californica*/*Toxicodendron diversilobum* association, located within a small section along the northwest portion of the treatment area, and the *Pseudotsuga*

*menziesii* – *Quercus kelloggii* association, located within the remainder of the treatment area. The *Pseudotsuga menziesii* – *Quercus kelloggii* association is sensitive (CDFW 2022b).

USFWS's National Wetlands Inventory (NWI) mapped a freshwater forested/shrub wetland linear feature approximately 100 feet outside of the Treatment Area 01A boundary (USFWS 2022b); however, no potentially jurisdictional aquatic features were discovered to be encroaching into this treatment area, or within Treatment Areas 01B and 01C, during the reconnaissance-level field surveys.

The data review identified one historical occurrence of a California Rare Plant Rank 1B plant, King's Mountain manzanita (*Arctostaphylos regismontana*), that was documented within Treatment Areas 01A and 01B, as well as Treatment Areas 04A and 04B. However, this occurrence is mapped generally in the vicinity of Peters Creek and locational details are unsubstantiated. Given the habitat types within Treatment Areas 01A, 01B, and 01C, these areas have the potential to support several special-status plants, including Anderson's manzanita (*Arctostaphylos andersonii*), arcuate bush-mallow (*Malacothamnus arcuatus*), bent-flowered fiddleneck (*Amsinckia lunaris*), chaparral ragwort (*Senecio aphanactis*), Dudley's lousewort (*Pedicularis dudleyi*), King's Mountain manzanita, Loma Prieta hoita (*Hoita strobilina*), minute pocket moss (*Fissidens pauperculus*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*), San Mateo woolly sunflower (*Eriophyllum latilobum*), Santa Cruz clover (*Trifolium buckwestiorum*), western leatherwood (*Dirca occidentalis*), white-flowered rein orchid (*Piperia candida*), and woodland woollythreads (*Monolopia gracilens*).

The data review identified red-bellied newt (*Taricha rivularis*), a California Species of Special Concern, as occurring on numerous occasions from 2010 through 2016 within Treatment Area 01A and along Grizzly Flat Trailhead and Upper Stevens Creek (Occ. No. 135) (CDFW 2022a). Given the habitat types within Treatment Areas 01A, 01B, and 01C, these areas also have potential to support several additional special-status wildlife, including Santa Cruz black salamander (*Aneides flavipunctatus niger*), California giant salamander (*Dicamptodon ensatus*), long-eared owl (*Asio otus*), marbled murrelet (*Brachyramphus marmoratus*), purple martin (*Progne subis*), white-tailed kite (*Elanus leucurus*), least Bell's vireo (*Vireo bellii pusillus*), pallid bat (*Antrozous pallidus*), ringtail (*Bassariscus astutus*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), puma (*puma concolor*), Crotch bumble bee (*Bombus crotchii*), and western bumble bee (*Bombus occidentalis occidentalis*).

### 3.1.2 Treatment Areas 01D, 01E, 01F, 01G, and 13

Treatment Areas 01D, 01E, 01F, and 01G are part of the Skyline Boulevard Shaded Fuel Break Project located along the west side of Sanborn Skyline County Park. These are 26.4-acre (01D), 19.7-acre (01E), 9.8-acre (01F), and 9.6-acre (01G) stretches of vegetation that run northwest/southeast along Skyline Boulevard, along the eastern side of the road. Treatment Area 13 is part of the Christmas Tree Farm Fuels Reduction Project that overlaps with Treatment Area 01G. Soils in these treatment areas are mostly residuum weathered from sandstone/mudstone complexes, such as Ben Lomond sandy loam, Casrock-skyridge-rock outcrop, Ben Lomond-Casrock, and Madonna loam (USDA 2022).

Sensitive vegetation communities within these treatment areas include three associations of the Douglas fir forest and woodland alliance: *Pseudotsuga menziesii* – *Umbellularia californica*/*Toxicodendron diversilobum* association, *Pseudotsuga menziesii* – *Arbutus menziesii* association, and the *Pseudotsuga menziesii* – *Notholithocarpus densiflorus* – *Umbellularia californica*/*Toxicodendron diversilobum* association (CDFW 2022b). These associations consist of Douglas fir trees in the canopy intermixed/co-dominant with California bay, Pacific madrone (*Arbutus menziesii*), tanoak

(*Notholithocarpus densiflorus*), and coast live oak, with a primarily poison oak (*Toxicodendron diversilobum*) understory. The sensitive *Umbellularia californica* – *Quercus agrifolia*/*Toxicodendron diversilobum* association, also dominated by California bay and other broadleaved species, also occurs in Treatment Areas 01F and 01G (CDFW 2022b). Additionally, Treatment Area 01E contains the *Quercus agrifolia* – *Arbutus menziesii* – *Umbellularia californica* association, which is dominated by coast live oak, Pacific madrone, and California bay in the canopy, intermixed with bigleaf maple (*Acer macrophyllum*), Douglas fir, and poison oak in the shrub layer, and the *Acer macrophyllum* – *Pseudotsuga menziesii*/*Corylus cornuta* association, which occurs along a perennial drainage located downslope. These two associations are also sensitive (CDFW 2022b).

Non-sensitive communities within Treatment Areas 01D, 01E, 01F, and 01G include communities within the mixed oak forest and woodland, Douglas fir forest and woodland, and broom patches alliances. A large patch of Spanish broom (*Spartium junceum*) occurs within the southeastern portion of the Treatment Area 01E, and also contains coyote brush and Scotch broom. Treatment Area 01G borders rural-residential homes, and Black Road bisects Treatment Area 01G to the southeast. The southeastern-most section of Treatment Area 01G contains a small patch of non-native grassland and a former Christmas tree farm (Treatment Area 13), which is characterized by the ornamental plantings land cover type and composed of cultivated firs (*Abies* sp.), pines (*Pinus* sp.), and giant sequoia trees (*Sequoiadendron giganteum*) that are interspersed with naturally occurring Douglas fir, Pacific madrone, and tanoak.

Potentially jurisdictional aquatic features are absent from all five treatment areas, but Lyndon Canyon Creek occurs within a canyon immediately below Treatment Area 01F, runs underneath Skyline Boulevard, and crosses underneath the southern portion of the treatment area from east to west.

There are no documented special-status plant occurrences within these treatment areas, but they do have the potential to support several special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, San Mateo woolly sunflower, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

There are no documented special-status wildlife species occurrences within these treatment areas, but Treatment Areas 01D, 01E, 01F, and 01G have the potential to support a number of special-status amphibians, including Santa Cruz black salamander, the California giant salamander, and red-bellied newt, as well as least Bell's vireo. These species are not expected to occur in Treatment Area 13 due to lack of aquatic habitat and presence of ornamental plantings. All five treatment areas may support long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, and puma.

### 3.1.3 Treatment Areas 02, 03A, and 03B

Treatment Area 02 is part of the Table Mountain Christmas Tree Farm Wildland/Urban Interface Fuel Reduction Project, and Treatment Areas 03A and 03B are part of the Charcoal Road-Table Mountain Shaded Fuel Break Project, all located within Upper Stevens Creek Park. These are 42.7-acre (02), 8.7-acre (03A), and 38.9-acre (03B) parcels of vegetation that run north/south along the Charcoal Road Pedestrian Trail. Soils in these treatment areas are sandy-based soils composed of the Ben Lomond–Casrock and Ben Lomond gravelly sandy loam complexes (USDA 2022).

Vegetation communities in these treatment areas are largely composed of woodland and forest associations, including *Pseudotsuga menziesii* – *Arbutus menziesii* and *Quercus agrifolia* – *Arbutus menziesii* – *Umbellularia californica* associations, both sensitive, and *Pseudotsuga menziesii* – *Umbellularia californica*/(*Toxicodendron diversilobum*) association in the northernmost section of Treatment Areas 02 and 03B, throughout Treatment Area 03A, and on either side of the Charcoal Road Pedestrian Trail (CDFW 2022b). The center of Treatment Areas 02 and 03B is composed of a former Christmas tree farm surrounded by patches of coyote brush scrub that has established within previously cleared/disturbed areas. Along the northwestern edge of Treatment Area 03A, Dudek biologists mapped a small patch of chamise chaparral, the sensitive *Adenostoma fasciculatum* – *Arctostaphylos manzanita* association (CDFW 2022b) that is intermixed with canyon live oak (*Quercus chrysolepis*), lotus (*Acmispon* spp.), bush monkey flower (*Diplacus aurantiacus*), and tree poppy (*Dendromecon rigida*). Stands of coast live oak and non-native grassland were observed to be mixed in with the dominant vegetation communities.

The USFWS NWI mapped a freshwater forested/shrub wetland linear feature immediately outside of Treatment Area 02 (USFWS 2022b), but this feature was not discovered to be encroaching into the treatment area during the reconnaissance-level field surveys. A tributary of Stevens Creek overlaps with the northwestern-most section of Treatment Area 03B, and is mapped by the USFWS NWI as a freshwater forested/shrub wetland linear feature (USFWS 2022b). Because of this feature's connectivity to Stevens Creek, it may be subject to RWQCB and/or CDFW jurisdiction under the Porter-Cologne Water Quality Act and California Fish and Game Code Section 1602, and any activities involving ground disturbance in the bed or bank of this feature may require permits from these agencies. No additional potentially jurisdictional aquatic features were discovered within the treatment areas.

There are no documented special-status plant occurrences within Treatment Areas 02, 03A, or 03B, but all three areas have potential to support several special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

California giant salamander (Occ. No. 98) and red-bellied newt (Occ. No. 135) have been documented on numerous occasions within 500 to 1,000 feet outside of the northern section of Treatment Area 03B within Upper Stevens Creek and associated riparian woodland (CDFW 2022a). There are historical observations of foothill yellow-legged frog (*Rana boylei*) within Stevens Creek (Occ. No. 2081); however, it is now believed that the species is extirpated from the area (CDFW 2022a). The tributary to Stevens Creek that overlaps with the northwestern corner of Treatment Area 03B does not contain pools with gravel or rocky substrate suitable for breeding by foothill yellow-legged frog.

Treatment Areas 02, 03A, and 03B also have potential to support the Santa Cruz black salamander, long-eared owl, marbled murrelet, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, and puma. Treatment Area 03A has low potential to support Crotch bumble bee and western bumble bee.

### 3.1.4 Treatment Areas 04A and 04B

Treatment Areas 04A and 04B are part of a defensible space project immediately east of Treatment Area 01B within Upper Stevens Creek Park in two 1.4-acre parcels of vegetation east of Skyline Boulevard. Soils in these treatment areas consist entirely of siltstone-derived soils, specifically the Ben Lomond–Felton complex (USDA 2022). The dominant vegetation community in these treatment areas is the Douglas fir forest and woodland alliance. Sensitive vegetation communities and potentially jurisdictional aquatic features are absent from these treatment areas.



King's Mountain manzanita has been historically documented within Treatment Areas 04A and 04B. Additionally, these treatment areas have the potential to support several other special-status plants, including Anderson's manzanita, Dudley's lousewort, minute pocket moss, San Mateo woolly sunflower, western leatherwood, whiteflowered rein orchid, and woodland woollythreads.

There are no documented special-status wildlife species occurrences within these treatment areas, but both areas may support several special-status wildlife species, including Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, and puma.

### 3.1.5 Treatment Areas 04C and 04D

Treatment Areas 04C and 04D are part of a defensible space project within the northern and eastern sections of Sanborn Skyline County Park, in a small 0.6-acre parcel of vegetation southwest of Big Basin Way (04C), and in several small parcels of vegetation (a total of 7.2 acres) surrounding pedestrian hiking trails, such as the Vernon J. Pick Trail and San Andreas Fault Trail (04D). Soils in these treatment areas are sandy-based soils composed of the Ben Lomond-Casrock complex (USDA 2022). The main vegetation community within these treatment areas consists of redwood forest and woodland, which is sensitive (CDFW 2022b). These areas are dominated by coast redwood trees, with a subcanopy of Douglas fir and a variety of broadleaf species and a sparse understory. The Welch-Hurst House, as well as several other county park structures, are present within Treatment Area 04D, along with several dirt pedestrian trails and paved pedestrian trails and facilities.

Treatment Area 04C overlaps with the confluence of two perennial streams, Bonjetti and McElroy Creeks, and is mapped by the USFWS NWI as Upper Perennial Riverine features (USFWS 2022b). Several potentially jurisdictional aquatic features are present within and immediately adjacent to Treatment Area 04D, including Todd Creek, several unnamed drainages and small creeks, and a freshwater pond. All these features may be subject to CDFW jurisdiction under California Fish and Game Code 1602 and/or RWQCB jurisdiction under the Porter-Cologne Water Quality Control Act.

There are no documented special-status plant occurrences within these treatment areas, but both areas have potential to support several special-status plants, including Anderson's manzanita, Dudley's lousewort, King's Mountain manzanita, minute pocket moss, San Mateo woolly sunflower, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

Although there are no documented special-status wildlife species occurrences within these treatment areas, Bonjetti, McElroy, and Todd Creeks may support breeding and/or foraging/dispersal habitat for California red-legged frog (*Rana draytonii*) and foothill yellow-legged frog, and potentially several other special-status wildlife species, including western pond turtle (*Actinemys marmorata*), Santa Cruz black salamander, California giant salamander, red-bellied newt, and least Bell's vireo. The freshwater pond immediately adjacent to Treatment Area 04D and adjacent to the Welch-Hurst House may support San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) due to the presence of aquatic vegetation surrounding the pond; however, the high levels of pedestrian activity surrounding this feature and the lack of connectivity to other breeding sites may preclude this species from occurring. The freshwater pond within this treatment area may also support western pond turtle and red-bellied newt, and a large number of newt (*Taricha* sp.) species were observed within this feature during the site visit. The Welch-Hurst House and other structures within Treatment Area 04D provide suitable roosting habitat for pallid bat



and Townsend's big-eared bat, but these species may also occur throughout the woodland areas of both treatment areas. Additionally, long-eared owl, marbled murrelet, purple martin, white-tailed kite, ringtail, San Francisco dusky-footed woodrat, and puma may occur within both treatment areas.

### 3.1.6 Treatment Areas 04E and 07

Treatment Area 04E is part of a defensible space project within the northeastern section of Sanborn Skyline County Park, in a few small parcels of vegetation (a total of 5.2 acres) within the Christensen Nursery, east of Sanborn Road. Treatment Area 07 also encompasses the Christensen Nursery, and is part of the Christensen Nursery Future Camping Project. Treatment Area 07 is a 25-3-acre parcel with a 100-foot (81.8-acre) buffer for additional analysis. Soils in these treatment areas consist of sandy-based soils and rock-out crop soil types composed of the Ben Lomond-Casrock, Ben Lomond gravelly sandy loam, and Sanikara-Mouser-Rock outcrop complexes (USDA 2022).

These treatment areas are dominated by ornamental vegetation associated with plantings of the Christensen Nursery and several open areas in which recent vegetation clearing occurred. There are several structures within these treatment areas, such as an old barn, old sheds, and old maintenance facilities. Vegetation communities within these treatment areas are composed of oak woodland and forest, including the sensitive *Quercus agrifolia* – *Arbutus menziesii* – *Umbellularia californica* association, the non-sensitive mixed oak – *Quercus agrifolia*/*Toxicodendron diversilobum* association, and the non-sensitive *Pseudotsuga menziesii* – *Umbellularia californica*/*Toxicodendron diversilobum*) association (CDFW 2022b). A small area of broom patches alliance is present along the western side of Treatment Area 07.

Portions of Todd Creek and unnamed tributaries to Lyndon Canyon Creek occur within the northwestern section of Treatment Area 07, and two constructed detention basins are present within the center of the treatment area. All these features may be considered jurisdictional.

There are no documented special-status plant occurrences within this treatment area, but the area has potential to support several special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, Sanford's arrowhead (*Sagittaria sanfordii*), San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

There are no documented special-status wildlife species occurrences within these treatment areas, but the perennial drainage may support California red-legged frog and foothill yellow-legged frog foraging and dispersal; adjacent uplands may also be used for dispersal. The perennial high stream flow nature of both streams may preclude breeding due to flows moving any egg masses that may have been laid. Todd Creek and the unnamed tributaries to Lyndon Canyon Creek may support least Bell's vireo breeding habitat. Additional special-status wildlife that may occur within Treatment Areas 04E and 07 include Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, and puma.

### 3.1.7 Treatment Areas 04F, 04G, and 08

Treatment Areas 04F and 04G are part of a defensible space project within the eastern section of Sanborn Skyline County Park in several small parcels of vegetation (a total of 14.7 acres) surrounding the Sanborn County Park main entrance, group picnic areas, and walk-in campground, south of Sanborn Road. Treatment Area 08 is part of the Sanborn Walk-In Campground Project in the eastern section of Sanborn Skyline County Park in a 6.6-acre parcel within the existing walk-in campground along the Sanborn Trail. A 100-foot (17.3-acre) buffer has been established around this treatment area for additional analysis. Soils in these treatment areas are sandy-based soils composed of the Ben Lomond–Casrock and Ben Lomond gravelly sandy loam complexes (USDA 2022).

Vegetation in these treatment areas varies based on location, with Douglas fir forest and woodland being the most prominent within the parcels to the north, east, and south, and redwood forest and woodland being the most prominent within the parcels to the west within the campground. Of these, the *Pseudotsuga menziesii* – *Notholithocarpus densiflorus* – *Umbellularia californica*/*Toxicodendron diversilobum* association and *Sequoia sempervirens* – *Acer macrophyllum* – *Umbellularia californica* association are sensitive (CDFW 2022b). The central parcels of Treatment Area 04F are dominated by the urban/developed land cover type composed of structures, park facilities, roadways, and paved pedestrian trails. These parcels contain a public picnic area, mapped as the ornamental plantings land cover type, which is composed of irrigated turf with retained Douglas fir and redwood trees and a manicured understory.

Several potentially jurisdictional unnamed drainages and aquatic features occur within and immediately adjacent to the parcels to the west, including a large perennial tributary to Todd Creek that bisects the parcels from east to west.

There are no documented special-status plant occurrences within these treatment areas, but the areas have potential to support several special-status plants, including Anderson’s manzanita, Dudley’s lousewort, King’s Mountain manzanita, minute pocket moss, San Mateo woolly sunflower, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

Although there are no documented special-status wildlife occurrences within these treatment areas, several of the drainages and creeks may support breeding and/or foraging/dispersal habitat for California red-legged frog and foothill yellow-legged frog, and potentially several other special-status wildlife species including western pond turtle, Santa Cruz black salamander, California giant salamander, red-bellied newt, and least Bell’s vireo. Structures and trees within these treatment areas may provide suitable roosting habitat for pallid bat and Townsend’s big-eared bat. Additionally, long-eared owl, marbled murrelet, purple martin, white-tailed kite, ringtail, San Francisco dusky-footed woodrat, and puma may occur within these treatment areas.

### 3.1.8 Treatment Areas 05A, 05B, and 05C

Treatment Areas 05A, 05B, and 05C are part of the Sanborn Road Shaded Fuel Break Project located in the northeastern section of Sanborn Skyline County Park in 5.3-acre (05A), 33.1-acre (05B), and 10.5-acre (05C) strips of vegetation that run north/south along both sides of Sanborn Road. Soils in these treatment areas are sandy-based soils composed of Ben Lomond–Casrock, Ben Lomond gravelly sandy loam, Katykat–Sanikara complex, and Sanikara–Mouser-Rock outcrop complexes, none of which are considered hydric soils or are known to support edaphic special-status plant species (USDA 2022).

Vegetation with the northern portions of these treatment areas, encompassing Treatment Areas 05A and 05B, consists of non-sensitive associations within the Douglas fir forest and woodland and mixed oak woodland alliances (CDFW 2022b). The southeastern section of the Sanborn Road Shaded Fuel Break Project, within Treatment Area 05C, consists of some sensitive vegetation, including the *Sequoia sempervirens* – *Acer macrophyllum* – *Umbellularia californica* association and *Pseudotsuga menziesii* – *Notholithocarpus densiflorus* – *Umbellularia californica*/*Toxicodendron diversilobum* association (CDFW 2022b). The remainder of Treatment Area 05C is composed of the *Pseudotsuga menziesii* – *Umbellularia californica*/*Toxicodendron diversilobum* association and urban/developed land cover associated with the park facilities and roads.

McElroy Creek overlaps Treatment Area 05B at its confluence with Todd Creek, as well as another unnamed tributary to Saratoga Creek. An unnamed perennial tributary to Todd Creek overlaps with Treatment Area 05C in the northwest section, and another unnamed drainage flows from south to north through the eastern end. All of these features may be considered jurisdictional.

There are no documented special-status plant occurrences within these treatment areas, but these areas have potential to support several special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

California giant salamander has been documented within Treatment Area 05B using upland habitat underneath downed logs within the vicinity of Sanborn Road and Bonjetti Creek (Occ. No. 100) (CDFW 2022a). Perennial creeks, drainages, and their tributaries within Treatment Areas 05B and 05C may support breeding and/or foraging/dispersal habitat for California red-legged frog and foothill yellow-legged frog, and potentially several other special-status wildlife species, including western pond turtle, Santa Cruz black salamander, red-bellied newt, and least Bell's vireo. Woodland habitat within all three treatment areas may provide suitable roosting habitat for pallid bat. Additionally, long-eared owl, marbled murrelet, purple martin, white-tailed kite, ringtail, San Francisco dusky-footed woodrat, and puma may occur within these treatment areas.

### 3.1.9 Treatment Area 06A

Treatment Area 06A is part of the Los Gatos Creek Watershed Collaborative Forest Health Grant Project for handwork fuels reduction in the northwestern section of Sanborn Skyline County Park in a 5.2-acre parcel of vegetation surrounding Summit Rock. Soils in this treatment area are composed of the Casrock–Skyridge–Rock outcrop complex, the Ben Lomond gravelly sandy loam complex, and the Ben Lomond–Casrock complex, none of which are considered hydric soils or are known to support edaphic special-status plant species (USDA 2022).

Vegetation within this treatment area consists of three non-sensitive associations within the Douglas fir forest and woodland, mixed oak woodland, and non-native grassland alliances. Potentially jurisdictional aquatic features are absent from this treatment area.

There are no documented special-status plant occurrences within this treatment area, but the area has potential to support a number of special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket

moss, most beautiful jewelflower, San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

Several special-status wildlife species are known to occur or could potentially occur in this treatment area. Summit rock is known to support a breeding pair of American peregrine falcons (*Falco peregrinus anatum*), which annually nest within the site (County of Santa Clara 2019). Summit rock may also provide suitable breeding habitat for golden eagle (*Aquila chrysaetos*). The treatment area may support several additional special-status wildlife, including Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, and puma.

### 3.1.10 Treatment Areas 06B and 06C

Treatment Areas 06B and 06C are part of the Los Gatos Creek Watershed Collaborative Forest Health Grant Project for mechanized fuels reduction located in parcels of vegetation throughout Upper Stevens Creek and Sanborn Skyline County Parks totaling 201.6 acres (06B) and 61.4 acres (06C). A variety of different soil types occur throughout these treatment parcels, largely composed of sandstone and mudstone derivatives. Soil types in these treatment areas include the Ben Lomond gravelly sandy loam complex, Ben Lomond sandy loam complex, Ben Lomond-Casrock complex, Madonna loam complex, and Aptos loam complex; none of these are considered hydric soils or are known to support edaphic special-status plant species (USDA 2022).

Because Treatment Areas 06B and 06C contain numerous parcels throughout both parks, the dominant vegetation communities are varied and include the following eight sensitive natural communities: *Pseudotsuga menziesii* – *Quercus chrysolepis* association, *Pseudotsuga menziesii* – *Arbutus menziesii* association, *Quercus agrifolia* – *Arbutus menziesii* – *Umbellularia californica* association, *Pseudotsuga menziesii* – *Notholithocarpus densiflorus* – *Umbellularia californica*/*Toxicodendron diversilobum* association, *Acer macrophyllum*/*Rubus ursinus* association, *Acer macrophyllum* – *Pseudotsuga menziesii*/*Corylus cornuta* association, *Baccharis pilularis*/*Nassella pulchra* – *Elymus glaucus* – *Bromus carinatus* association, and *Pseudotsuga menziesii* – *Quercus kelloggii* association (CDFW 2022b). The *Pseudotsuga menziesii* – *Umbellularia californica*/*Toxicodendron diversilobum* association is prominent on either side of the Charcoal Road Pedestrian Trail in Treatment Area 06C. Other vegetation communities in these treatment areas include Spanish broom patches, coyote brush scrub, non-native grassland, former Christmas tree farms characterized as ornamental plantings land cover type, and non-sensitive associations within the Douglas fir forest and woodland and mixed oak forest and woodland alliances. Portions of Todd Creek and unnamed tributaries to Lyndon Canyon Creek, as well as two human-made detention basins, occur within Treatment Area 06B, and all these features may be considered jurisdictional. The USFWS NWI has mapped a freshwater forested/shrub wetland linear feature immediately outside of the Treatment Area 06C boundary (USFWS 2022b), but no potentially jurisdictional aquatic features were observed within the treatment area during the reconnaissance-level field surveys.

There are no documented special-status plant occurrences within these treatment areas, but the areas have potential to support several special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, San Mateo woolly sunflower, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

Although there are no documented special-status wildlife species occurrences within this treatment area, the drainage feature in the northern section of Treatment Area 06B may support breeding and/or foraging/dispersal habitat for California red-legged frog and foothill yellow-legged frog, and potentially several other special-status wildlife species, including western pond turtle, Santa Cruz black salamander, California giant salamander, red-bellied newt, and least Bell's vireo. Santa Cruz black salamander, California giant salamander, and red-bellied newt may also occur in Treatment Area 06C. Trees within and adjacent to both treatment areas provide suitable roosting habitat for pallid bat, and long-eared owl, marbled murrelet, purple martin, white-tailed kite, ringtail, San Francisco dusky-footed woodrat, and puma may occur within both treatment areas. The coyote brush scrub and non-native grassland habitats provide low-quality habitat for Crotch bumble bee and western bumble bee.

### 3.1.11 Treatment Area 09

Treatment Area 09 is part of the Lake Ranch Reservoir Wildfire Resiliency Project located in the southern section of Sanborn Skyline County Park in a 312.1-acre parcel bordering Lake Ranch Reservoir to the southwest. Soil types in this treatment area include the Casrock–Skyridge–Rock outcrop complex, Ben Lomond–Casrock complex, Madonna loam complex, and Aptos loam complex; none of these are considered hydric soils or are known to support edaphic special-status plant species (USDA 2022).

Vegetation within Treatment Area 09 is dominated by non-sensitive associations within mixed oak woodland and Douglas fir forest and woodland alliances. However, areas of sensitive riparian associations, *Acer macrophyllum* – *Pseudotsuga menziesii/Corylus cornuta* association and *Umbellularia californica* – *Quercus agrifolia/Toxicodendron diversilobum* association, occur along unnamed perennial tributaries to Lyndon Canyon Creek that run east through the treatment area, all of which may be considered jurisdictional (CDFW 2022b). This treatment area is west and upslope of Lake Ranch Reservoir.

There are no documented special-status plant occurrences within this treatment area, but the area has potential to support several special-status plants, including Anderson's manzanita, arcuate bush-mallow, bent-flowered fiddle neck, chaparral ragwort, Dudley's lousewort, King's Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

California giant salamander has been previously documented within the southeast corner of this treatment area in upper Lyndon Canyon along two creek crossings of the John Nicholas Trail (Occ. No. 123) (CDFW 2022a). Additionally, the drainages and creeks within the treatment area and surrounding forest habitat may support breeding and foraging habitat for California red-legged frog, foothill yellow-legged frog, Santa Cruz black salamander, and red-bellied newt. Riparian habitat may also support breeding least Bell's vireo. Forest habitat within Treatment Area 09 may also support long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, and puma.

### 3.1.12 Treatment Area 10

Treatment Area 10 is part of the Primary and Secondary Evacuation Routes Shaded Fuel Break Projects along the eastern boundary of Sanborn Skyline County Park in a 101.4-acre strip of vegetation along Sanborn Road, Lake Ranch Trail, and the southeastern section of the John Nicholas Trail that connects with Black Road. Soils in

this treatment area are sandy-based soils composed of the Ben Lomond–Casrock and Ben Lomond gravelly sandy loam complexes (USDA 2022).

Treatment Area 10 is dominated by non-sensitive associations within mixed oak woodland and Douglas fir forest and woodland alliances. However, stands of sensitive woodland and forest vegetation are present throughout, including the *Pseudotsuga menziesii* – *Notholithocarpus densiflorus* – *Umbellularia californica*/*Toxicodendron diversilobum* association, *Sequoia sempervirens* – *Acer macrophyllum* – *Umbellularia californica* association, and *Umbellularia californica* – *Quercus agrifolia*/*Toxicodendron diversilobum* association (CDFW 2022b). Small stands of sensitive riparian vegetation, including the *Acer macrophyllum* – *Pseudotsuga menziesii*/*Corylus cornuta* association and *Salix gooddingii* – *Salix laevigata* association occur along the northern side of Lake Ranch Reservoir. Redwood, California bay, and riparian communities are mostly prevalent along drainages of the treatment area. Non-native grassland and *Typha angustifolia* – *Typha latifolia* – *Typha domingensis*/*Schoenoplectus americanus* association are also present along the northern banks of Lake Ranch Reservoir. Cattail marshes do not have a sensitivity ranking (CDFW 2022b) but are generally associated with aquatic features and are thus considered to have high habitat value for wildlife and may be subject to the jurisdiction of CDFW. Along the south side of Lake Ranch Reservoir along the John Nicholas pedestrian trail, a small patch of field horsetail (*Equisetum arvense*) is present within a freshwater emergent wetland and is considered sensitive (CDFW 2022b).

Treatment Area 10 contains several potentially jurisdictional aquatic features, including portions of Todd Creek and Lyndon Canyon Creek and numerous unnamed tributary drainages, in addition to a portion of Lake Ranch Reservoir, freshwater ponds, emergent wetlands, and shrub scrub wetlands. All of these features may be considered jurisdictional.

There are no documented special-status plant occurrences within this treatment area, but the area has potential to support several special-status plants, including Anderson’s manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley’s lousewort, King’s Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, Sanford’s arrowhead, San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

Western pond turtle has been previously documented within Lake Ranch Reservoir; an adult turtle was observed basking on the northeastern bank of the reservoir in 2003 (Occ. No. 1146) (CDFW 2022a). California giant salamander has also been previously documented in Treatment Area 10 in an area that overlaps with Treatment Area 09 (described above). Additionally, the other drainages and creeks within the treatment area and surrounding forest habitat may support breeding and foraging habitat for California red-legged frog, foothill yellow-legged frog, Santa Cruz black salamander, red-bellied newt, and least Bell’s vireo. Forest habitat within Treatment Area 10 may also support long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, Townsend’s big-eared bat, ringtail, San Francisco dusky-footed woodrat, and puma. Golden eagle and peregrine falcon may use the Lake Ranch area as foraging due to the open nature of lake and surrounding landscape, and the abundance of aquatic and terrestrial resources that support prey items. The non-native grassland habitat may support low-quality habitat for Crotch bumble bee and western bumble bee.

### 3.1.13 Treatment Areas 11 and 12

Treatment Area 11 is part of the Lyndon Canyon Creek Wildfire Resiliency Project in the southern section of Sanborn Skyline County Park in a 330.1-acre parcel on both sides of the southeastern section of the John Nicholas Trail. Treatment Area 11 also overlaps with Treatment Area 12, which is part of the Black Road Shaded



Fuel Break Project in a 8-acre stretch of vegetation that is on both sides of Black Road between John Nicholas Trail and Skyline Boulevard. Soil types in these treatment areas include the Ben Lomond gravelly sandy loam complex, Ben Lomond–Casrock complex, Madonna loam complex, and Aptos loam complex; none of these are considered hydric soils or are known to support edaphic special-status plant species (USDA 2022).

Vegetation within Treatment Areas 11 and 12 is largely dominated by the *Pseudotsuga menziesii* – *Notholithocarpus densiflorus* – *Umbellularia californica*/*Toxicodendron diversilobum* association. The *Umbellularia californica* – *Quercus agrifolia*/*Toxicodendron diversilobum* (*Corylus cornuta*) association occurs along an unnamed perennial drainage that runs east/west across the northern boundary of Treatment Area 11. The *Sequoia sempervirens* – *Acer macrophyllum* – *Umbellularia californica* association surrounds another unnamed perennial drainage in the center of Treatment Area 11. All three vegetation communities are sensitive (CDFW 2022b). In addition to the two perennial drainages that support sensitive riparian vegetation in Treatment Area 11, the area contains several unnamed tributaries to Lyndon Canyon Creek that are potentially jurisdictional. Two potentially jurisdictional drainages run underneath the existing Black Road alignment in Treatment Area 12 via culverts.

The literature and data review identified one historical occurrence of a California Rare Plant Rank 1B plant, woodland woollythreads, that overlaps the southeastern corner of Treatment Area 11. Both Treatment Areas 11 and 12 have potential to support this species, in addition to a number of other special-status plants, including Anderson’s manzanita, arcuate bush-mallow, bent-flowered fiddleneck, chaparral ragwort, Dudley’s lousewort, King’s Mountain manzanita, Loma Prieta hoita, minute pocket moss, most beautiful jewelflower, San Mateo woolly sunflower, Santa Cruz clover, western leatherwood, white-flowered rein orchid, and woodland woollythreads.

California giant salamander has been previously documented within the center of Treatment Area 11 in upper Lyndon Canyon along two creek crossings of the John Nicholas Trail (Occ. No. 123) (CDFW 2022a). Additionally, the drainages and creeks within Treatment Areas 11 and 12 and surrounding forest habitat may support breeding and foraging habitat for California red-legged frog, foothill yellow-legged frog, Santa Cruz black salamander, red-bellied newt, and least Bell’s vireo. Dense woodland habitat within both treatment areas may also support long-eared owl, marbled murrelet, purple martin, white-tailed kite, pallid bat, Townsend’s big-eared bat, ringtail, San Francisco dusky-footed woodrat, and puma.

## 3.2 Sensitive Biological Resources

Table 6 identifies sensitive resources by treatment area and PEIR biological resource impact. Figures 4-1 through 4-3, Vegetation Communities and Potentially Jurisdictional Aquatic Resources, and Figures 5-1 through 5-3, Biological Resources – CNDDB Occurrences and Wildlife Observations, provide specific locations of some sensitive resources and potential sensitive resources. Because the surveys conducted under SPR BIO-1 are only reconnaissance-level surveys, many of the resources identified have not been mapped. Resources that must be avoided should be mapped and marked in the field prior to Project implementation, as described in the SPRs and mitigation measures in the PEIR (CBFFP 2019), and as discussed in Chapter 4, Recommendations, below.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
01A	Dudley's lousewort, San Mateo woolly sunflower	King's Mountain manzanita (historically documented), others may occur.	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma, Crotch bumble bee, western bumble bee	None	Mixed oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
01B	Dudley's lousewort, San Mateo woolly sunflower	King's Mountain manzanita (historically documented), others may occur.	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma, Crotch bumble bee, western bumble bee	None	None	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 5.
01C	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail,	None	Douglas fir forest and woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
					San Francisco dusky-footed woodrat, puma, Crotch bumble bee, western bumble bee										
01D	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Douglas fir forest and woodland, Douglas fir – tanoak forest and woodland, mixed oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
01E	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	Bigleaf maple forest and woodland	Coast live oak woodland and forest, Douglas fir forest and woodland, bigleaf maple forest and woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 4, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
01F	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail,	None	California bay forest and woodland, Douglas fir forest and woodland, Douglas fir – tanoak woodland,	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
					San Francisco dusky-footed woodrat, puma		mixed oak woodland								
01G	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Douglas fir – tanoak forest and woodland	None	Yes, but impacts LTS	No significant sites, but see “Non-Listed Special-Status Wildlife”	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
02	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Coast live oak woodland and forest, Douglas fir forest and woodland	None	Yes, but impacts LTS	No significant sites, but see “Non-Listed Special-Status Wildlife”	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
03A	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma,	None	Chamise chaparral, Douglas fir forest and woodland	None	Yes, but impacts LTS	No significant sites, but see “Non-Listed Special-Status Wildlife”	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 5, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
					Crotch bumble bee, western bumble bee										
03B	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Coast live oak woodland and forest, Douglas fir forest and woodland	Tributary of Steven's Creek, freshwater forested / shrub wetland linear feature, in north-western section	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
04A	Dudley's lousewort, San Mateo woolly sunflower	King's Mountain manzanita (historically documented), others may occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	None	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
04B	Dudley's lousewort, San Mateo woolly sunflower	King's Mountain manzanita (historically documented), others may occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	None	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
04C	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Redwood forest and woodland	Overlaps with two perennial riverine features, Bonjetti and McElroy Creeks	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
04D	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, San Francisco garter snake, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Redwood forest and woodland	Todd Creek, several unnamed drainages and small creeks, and a fresh-water pond	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
04E	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	None	Pallid bat, Townsend's big-eared bat, white-tailed kite, San Francisco dusky-footed woodrat	None	Coast live oak woodland	Human-made detention basins	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2b, 2e, 2g, 3a, 4, 5.



**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
04F	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Douglas fir – tanoak forest and woodland, redwood forest and woodland	Several unnamed drainages and aquatic features, including a perennial tributary to Todd Creek	Yes, but impacts LTS	No significant sites, but see “Non-Listed Special-Status Wildlife”	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
04G	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Redwood forest and woodland	Several unnamed drainages and aquatic features, including a perennial tributary to Todd Creek	Yes, but impacts LTS	No significant sites, but see “Non-Listed Special-Status Wildlife”	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
05A	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	None	None	Yes, but impacts LTS	No significant sites, but see “Non-Listed Special-Status Wildlife”	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
05B	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Mixed oak woodland	McElroy Creek overlaps the treatment area at its confluence with Todd Creek, as well as another unnamed tributary to Saratoga Creek,	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
05C	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Douglas fir – tanoak forest and woodland, redwood forest and woodland	Unnamed drainages and tributary to Todd Creek	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
06A	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, American peregrine falcon, golden eagle, long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-	None	Mixed oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
					footed woodrat, puma										
06B	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma, Crotch bumble bee, western bumble bee	Bigleaf maple forest and woodland	Coast live oak woodland and forest, coyote brush scrub, Douglas fir forest and woodland, Douglas fir – tanoak forest and woodland, bigleaf maple forest and woodland	Portions of Todd Creek and unnamed tributaries to Lyndon Canyon Creek	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 4, 5, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
06C	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma, Crotch bumble bee, western bumble bee	None	Coast live oak woodland and forest, Douglas fir forest and woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 5.
07	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least	None	Coast live oak woodland and forest	Todd Creek, two human-made detention basins	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
					Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma										
08	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Redwood forest and woodland	Several unnamed drainages and aquatic features, including perennial tributary to Todd Creek	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
09	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet.	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma	Bigleaf maple forest and woodland, California bay forest and woodland	Bigleaf maple forest and woodland, California bay forest and woodland	Unnamed perennial tributaries to Lyndon Canyon Creek	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 4, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
10	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, American peregrine falcon, golden eagle, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, western pond turtle, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma, Crotch bumble bee, western bumble bee	Bigleaf maple forest and woodland, cattail marshes, field horsetail - scouringrush horsetail - variegated scouringrush wet meadow, Goodding's willow - red willow riparian woodland and forest	California bay forest and woodland, bigleaf maple forest and woodland, Douglas fir - tanoak forest and woodland, redwood forest and woodland	Portions of Todd Creek, Lyndon Canyon Creek, several unnamed tributary drainages, Lake Ranch Reservoir, freshwater ponds, emergent wetlands, shrub scrub wetlands	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 4, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
11	Dudley's lousewort, San Mateo woolly sunflower	Woodland woollythreads (historically documented), others may occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma	California bay forest and woodland, redwood forest and woodland	California bay forest and woodland, Douglas fir - tanoak forest and woodland, redwood forest and woodland	Two perennial drainages, and several unnamed tributaries to Lyndon Canyon Creek	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 4, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.

**Table 6. Sensitive Resource by Treatment Area and California Vegetation Treatment Program Program Environmental Impact Report Bio Impact**

Treatment Area No.	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat (SPR BIO-4)	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands (MM BIO-4)	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds (SPR BIO-12)	Local Plans, Policies, Ordinances	Conflict with HCP or Other Plan	
12	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	California red-legged frog, foothill yellow-legged frog, marbled murrelet	Santa Cruz black salamander, California giant salamander, red-bellied newt, long-eared owl, purple martin, white-tailed kite, least Bell's vireo, pallid bat, Townsend's big-eared bat, ringtail, San Francisco dusky-footed woodrat, puma	None	Douglas fir - tanoak forest and woodland	Two drainages	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 3, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 3a, 4, 5.
13	Dudley's lousewort, San Mateo woolly sunflower	May occur	Two survey passes: one in April and one in June	Marbled murrelet	Long-eared owl, purple martin, white-tailed kite, pallid bat, ringtail, San Francisco dusky-footed woodrat, puma	None	None	None	Yes, but impacts LTS	No significant sites, but see "Non-Listed Special-Status Wildlife"	LTS impacts	Yes	Consistent	None	SPR BIO-1, 2, 6, 7, 9, 10, 12; MM BIO-1a, 1b, 2a, 2b, 2e, 2g, 5.

Source: CBFFP 2019  
 MM = Mitigation Measure; SPR = Standard Project Requirement; HCP = Habitat Conservation Plan; LTS = less than significant



## 4 Recommendations

This section provides recommendations for implementing PEIR SPRs and MMs specific to the proposed treatments. For some SPRs, no additional details are described below, but the measures should be implemented as described in the project description and as required in the PEIR (CBFFP 2019). These are as follows:

- SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub
- SPR BIO-6: Prevent Spread of Plant Pathogens

SPRs that do not apply to the proposed treatment are SPR BIO-8: Identify and Avoid or Minimize Impacts to Coastal Zone ESHAs, and SPR BIO-11: Install Wildlife Friendly Fencing (Prescribed Herbivory). The latter does not apply because prescribed herbivory is not proposed.

The recommendations below incorporate those provided by CDFW during coordination (CDFW 2023; Attachment G). The recommendations below include several to avoid take of California red-legged frog, foothill yellow-legged frog, marbled murrelet, and federally listed plants. Any recommendations provided by USFWS, or additional recommendations by CDFW, should be incorporated into the final treatment plan.

*SPR BIO-1: Review and Survey Project-Specific Biological Resources.* Data review and reconnaissance-level field surveys were conducted for all 30 treatment areas. The data reviewed included the biological resources setting, species and sensitive natural communities tables, and habitat information in the PEIR for the ecoregions where the treatments will occur. It also included review of vegetation mapping data, species distribution/range information, CNDDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. The reconnaissance-level field surveys included visual and auditory inspection for biological resources, identifying and documenting sensitive resources, and an assessment of habitat suitability for special-status plant and animal species. Where it is determined that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided, one of the following avoidance methods will be implemented prior to initiating treatment and will remain in effect throughout the treatment: physical avoidance of the suitable habitat (establishing a buffer using flagging, fencing, stakes, or existing landscape demarcations to delineate the boundary of the avoidance area) or seasonal avoidance (conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity, such as the breeding or blooming season). If any new treatment areas are added or treatment area boundaries are expanded, a reconnaissance-level survey must be conducted in the new areas prior to implementation of treatment.

*SPR BIO-2: Require Biological Resource Training for Workers.* All crew members and contractors are required to receive training from a biologist prior to beginning a treatment project. The training will include the identification, life history information, and avoidance of special-status species; identification and avoidance of sensitive natural communities and habitats; appropriate work practices necessary to comply with the biological SPRs, mitigation measures, and applicable environmental laws and regulations; 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 biologist. The biologist 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. Resources to be addressed are those described in this memorandum. Special-status species to be addressed in the training should include, at minimum, the following

- Dudley’s lousewort
- San Mateo woolly sunflower
- King’s Mountain manzanita
- Woodland woollythreads
- California red-legged frog
- Foothill yellow-legged frog
- Santa Cruz black salamander
- California giant salamander
- Red-bellied newt
- Western pond turtle
- American peregrine falcon
- Golden eagle
- Long-eared owl
- Purple martin
- White-tailed kite
- Least Bell’s vireo
- Marbled murrelet
- Crotch bumble bee
- Western bumble bee
- Pallid bat
- Townsend’s big-eared bat
- Ringtail
- San Francisco dusky-footed woodrat
- Puma

*SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.* Sensitive natural communities have been mapped within the treatment areas in accordance with CDFW’s Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2021). These 17 sensitive natural communities and their rarity rankings are provided in Table 3, and their locations are identified in Figures 4-1 through 4-3. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- **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.

*SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.* Three sensitive riparian associations within the bigleaf maple forest and woodland and the Goodding's willow – red willow – riparian woodland and forest alliances were identified within the treatment areas. If impacts to these associations cannot be avoided, treatment activities would be designed to avoid loss or degradation of riparian habitat function in accordance with SPR BIO-4, specifically:

- Treatment activities will be designed to 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.
- Treatments will minimize the removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) 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 the applicable regulatory agencies approve otherwise).
- 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 will 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.* One sensitive chaparral community, chamise chapparal, was mapped within Treatment Area 3A (see Figures 4-1 through 4-3). If impacts to this area cannot be avoided, treatment activities would be designed to avoid type conversion in accordance with SPR BIO-5. Specifically:

- The treatment design will include evaluating and determining the appropriate spatial scale of the type conversion and demonstrating that the habitat function would be at least maintained within the identified spatial scale. 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.

- Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval unless the habitat function 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. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include 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.

The project proponent 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 the PEIR.

*SPR BIO-7: Survey for Special-Status Plants.* Two survey passes in April and June should be adequate to detect all special-status plant species with potential to occur within the treatment areas. The surveys 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.
  - **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.

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

*SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.* This SPR would be implemented in all treatment areas. Where Spanish broom has been mapped in Treatment Areas 1E, 6B, and 7 (Figures 4-1 through 4-3), and where invasive plants, noxious weeds, and invasive wildlife occur throughout the treatment areas, these invasive species would be removed in accordance with SPR BIO-9. No other significant areas of invasive non-native species were identified in the treatment areas. The majority of the forest health actions proposed under the Forest Health Plan would not involve herbicides. Only broom and other invasive plant species would be controlled using herbicide in accordance with the County's IPM Policy and Ordinance. For areas that contain broom and other invasive plant species that need to be treated with herbicide, these treatments would not be applied in any area within 300 feet of potential aquatic California red-legged frog/foothill yellow-legged frog habitat (all NWI wetland types shown in Figures 5-1 through 5-3). CDFW may recommend implementation of all measures included in SPR BIO-9 to protect Dudley's lousewort and San Mateo woolly sunflower from invasive plant establishment. Specific measures include:

- All clothing, footwear, and equipment must be appropriately decontaminated before entering the treatment area and when leaving an area with invasive species;
- All heavy equipment and vehicles entering treatment zones must be inspected and pressure washed or otherwise decontaminated at a designated weed-cleaning station prior to entering the treatment area. Anti-fungal wash agents could be specified if the equipment was exposed to any pathogens that could affect native species;
  - Equipment must be staged in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
  - Significant infestations of invasive plant species identified during reconnaissance-level surveys will be targeted 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 Managers" (Cal-IPC 2012, or current version).

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

*SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.* No surveys are required under any established survey protocol. However, to comply with the PEIR (CBFFP 2019), implementation of this SPR and of MM BIO-2a, MM BIO-2b, MM BIO-2e, and MM BIO-2g would include the following:

- *Surveys for special-status amphibians.* Pre-activity surveys for California giant salamander, California red-legged frog, foothill yellow-legged frog, red-bellied newt, and Santa Cruz black salamander would be conducted no more than 48 hours prior to initial treatment activities within all areas of suitable habitat that would be directly affected by vegetation removal activities, and within 50 feet of such areas. Suitable habitat for these species within the treatment areas consist of damp upland forested areas near and adjacent to existing aquatic features (all NWI wetland types shown in Figures 5-1 through 5-3). Suitable California red-legged frog and foothill yellow-legged frog refugia habitat consists of areas that have consistent summer moisture, including downed logs, burrows, hollows in trees or roots, moist leaf litter, and similar microhabitats. Appropriate no-work buffers would be established around aquatic features that may host sensitive amphibian species and around suitable habitat areas for frog refugia. These features would be completely avoided during vegetation removal activities. Biological monitoring by a qualified biologist during mechanical and manual treatment activities within or adjacent to sensitive habitat areas would be implemented to avoid injury to or mortality of individual special-status amphibians. If the qualified biologist detects a special-status amphibian during treatments, a non-disturbance buffer of 100 feet will be implemented around the individual unless it is determined by a qualified biologist 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 biologist.
- *Seasonal work restrictions for special-status bats and other roosting bats.* If treatment area activities require the removal of trees during peak activity timeframes when young or overwintering bats may be present (generally March through April, and August through October), such activities could directly impact active bat roosts. To avoid impacts to active bat roosts, tree removals would occur outside peak bat activity timeframes to the extent feasible. Additionally, it is recommended that daily restrictions on the timing of any work activities be limited to daylight hours to reduce disturbance to roosting (and-foraging) bat species.
- *Surveys for special-status bats, and other roosting bats.* A biologist with demonstrated experience conducting bat habitat assessments and roost surveys would conduct a focused survey of trees identified for removal no more than 30 days prior to any removals during peak bat activity timeframes. The survey would include a determination on whether active bat roosts are present on or within 50 feet of the treatment site. If pallid bat or Townsend's big-eared bat is detected to be roosting within any of the treatment areas, CDFW would be contacted for additional instruction. If a non-breeding and non-wintering common bat colony is found, the individuals would be evicted under the direction of a qualified biologist to ensure their protection and avoid unnecessary harm. If a maternity colony or overwintering colony is found within the treatment areas, then avoidance would be implemented in accordance with MM BIO-2b. 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 biologist.
- *Surveys for San Francisco dusky-footed woodrat.* Pre-activity surveys for San Francisco dusky-footed woodrat and houses would be conducted within 30 days prior to the commencement of vegetation removal activities to identify, flag, and map any active woodrat houses within or adjacent to the treatment areas. If San Francisco dusky-footed woodrat or woodrat middens are observed, avoidance

would be implemented in accordance with MM BIO- 2b. Specifically, woodrat nests would be given a buffer of 5 to 10 feet where feasible. If San Francisco dusky-footed woodrat nests within treatment areas cannot be avoided, a qualified biologist would implement nest relocation procedures outside of the woodrat breeding season (April through mid-July). The biologist would dismantle the woodrat nest by hand and rebuild the nest outside of the treatment footprint. Rebuilt nests would 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. Nest removal efforts would take place at dusk or dawn when woodrats are least susceptible to predation. Nest removal would not take place during inclement or extreme weather conditions. Prior to nest removal, personal protective equipment should be worn to minimize potential human exposure to possible diseases carried by woodrats. In areas of existing woodrat habitat, pile burning should take place as soon as feasible to reduce the risk of woodrats occupying the debris piles. Prior to burning, debris piles should be disturbed to ensure any woodrats inside of the piles have the opportunity to escape.

- *No work during or after rain events.* No work would be scheduled within 300 feet of potential California red-legged frog or foothill yellow-legged frog habitat (all NWI wetland types shown in Figures 5-1 through 5-3) when rain is forecast or within 48 hours after a rain event.
- *California red-legged frog and foothill yellow-legged avoidance (all NWI wetland types shown in Figures 5-1 through 5-3).* To avoid any potential for take, mechanized equipment or vehicles would not be used in scrub, woodland, or riparian habitats within 300 feet of all NWI wetland-type features shown in Figures 5-1 through 5-3.
- *San Francisco garter snake avoidance.* Prior to any vegetation removal activity within Treatment Area 04D, a qualified biologist will visually inspect the treatment area for the presence of San Francisco garter snake. If a San Francisco garter snake is encountered in the project area, the snake will not be handled; a no-disturbance buffer will be implemented; and the snake will be left alone until it leaves the area of its own volition. All vehicles and equipment staged near suitable San Francisco garter snake habitat must be checked for the snake before moving.
- *Marbled murrelet habitat assessment, surveys, and avoidance measures:* In areas where marbled murrelet nesting habitat may be present, a qualified biologist would conduct a habitat assessment prior to the start of project activities. The habitat assessment would include a visual inspection of suitable nesting habitat features within 0.25 miles of the project area that occur within old growth conifer forested areas. Suitable habitat characteristics are described in Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research (Mack et al. 2003). Habitat features found during the assessment will be identified, flagged, mapped, or marked for avoidance and retention as a sensitive area.. If suitable nesting habitat is discovered, a qualified biologist will develop an appropriate no-disturbance buffer around suitable nesting habitat identified within 0.25 miles of the project area during the murrelet nesting season (March 24 to September 15). Project-generated sound must not exceed ambient levels (< 50 decibels) by 20–25 decibels and must not exceed 90 decibels when combined with ambient sound conditions, and human activities must not occur within 330 feet or less line-of sight distance to an active marbled murrelet nest (USFWS 2020). To avoid impacts to marbled murrelets, treatment activities must be conducted during daylight hours only, between the period of 1.5 hours after official sunrise and 1.5 hours before official sunset, avoiding work during dawn and dusk hours during the breeding season (March 24 to September 15).
- *American peregrine falcon surveys and avoidance:* Pre-activity surveys for American peregrine falcon would be conducted by a qualified biologist no more than 72 hours prior to the commencement of vegetation treatment activities to identify and map any active nests. If an active American peregrine



falcon nest is found during pre-activity surveys, a no-disturbance buffer of 500 feet would be implemented around the nest during the breeding season (March through June), within which no treatment activities shall occur until a qualified biologist has determined that the chicks have fledged.

- **Least Bell's vireo surveys and avoidance:** If treatment activities will occur within 250 feet of riparian habitat, a qualified biologist will consult the CNDDDB to determine if there has been nesting at the site in the past three years. If there are records of nesting at the site within the past three years, the project proponent is required to avoid the nest sites. If no nesting has been recorded in the past three years, a qualified biologist will conduct a pre-activity survey to identify and map suitable nesting habitat (early successional riparian vegetation dominated by willows with a thick, shrubby understory). If suitable nesting habitat is found during this survey, the project may avoid all areas within a 250-foot buffer of the potential nesting habitat. If the Project chooses not to avoid the potential nesting habitat, a qualified biologist would conduct a pre-activity survey during the breeding season (March 15 to July 31) to document the presence or absence of nesting least Bell's vireos following the USFWS's 2001 Least Bell's Vireo Survey Guidelines or latest protocol. Surveys would be conducted between dawn and 11:00 am (SCVHA 2017). If project activities will occur during the breeding season, surveys will be completed no more than two calendar days prior to commencement of treatment activities. If an active least Bell's vireo nest is found during pre-activity surveys, a no-disturbance buffer of 250 feet would be implemented around the nest, within which no treatment activities shall occur during the breeding season (March 15 to July 31) until a qualified biologist has determined that the chicks have fledged. The locations of these nests would be submitted to the CNDDDB, USFWS, and CDFW.
- **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.
- **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).

*Additional surveys for non-listed special-status wildlife species.* Pre-activity surveys would be conducted for western pond turtle, ringtail, and puma. If any of these species are identified, the locations would be marked in the field, and avoidance would be implemented in accordance with MM BIO-2b. Specifically:

- For all treatment activities except prescribed burning, a no-disturbance buffer of a minimum of 100 feet will be established around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries), unless a smaller buffer would be sufficient for protection, or a larger buffer would be needed.
- 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 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 biologist may 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 biologist 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 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, the qualified biologist will determine the period within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species.

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 biologist will identify any habitat features that are necessary for survival of the affected wildlife species. 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.
- A qualified 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.

A qualified biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures 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 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 biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment 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.

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 biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified biologist based on the species and habitats and any recommended buffer distances in agency 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.
- Prior to implementing treatment activities, a qualified biologist will conduct reconnaissance surveys within the treatment areas for suitable Crotch bumble bee and western bumble bee habitat that contains associated floral resources. If suitable habitat is present, Mitigation Measure BIO-2g will apply, and all treatment activities will avoid those areas. If special-status bumble bee nesting sites are found during project activities, no-disturbance buffers will be placed around the nesting sites, and treatment activities will avoid these areas until the end of the bumble bee nesting season.
- To avoid impacts on special-status amphibians and reptiles (i.e., California giant salamander, red-bellied newt, and Santa Cruz black salamander), focused surveys will be conducted by a qualified biologist, within habitat suitable for the species prior to mechanical and manual treatments.
- 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, long-eared owl, purple martin, and white-tailed kite, focused surveys for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season.
- 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.* If treatment is initiated in any treatment area between January 15 and September 1, and 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., CNDDDB, eBird database, State Wildlife Action Plan) will be reviewed in advance of the survey to identify the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment sites and the immediately surrounding vicinity viewable from the treatment sites. The survey areas 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, as 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 active nests are located or determined to likely be present (i.e., presence of eggs and/or chicks), buffers, avoidance, treatment modifications, and/or treatment deferral would be implemented in accordance with SPR BIO-1, 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.

*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). WLPZs 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<sup>1</sup>

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	See table note 2.	See table note 2.
30-50 % Slope	100	75	See table note 2.	See table note 2.
>50 % Slope	150	100	See table note 2.	See table note 2.

**Notes:**

<sup>1</sup> WLPZ width (ft) – distance from top of bank to the edge of the protection zone.  
<sup>2</sup> 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 15 and disturbances that are created after October 15 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, riprap, 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.

### Other Recommendations

- Marbled murrelet: If any marbled murrelets are encountered during treatment, work in the vicinity of the observation would be stopped, CDFW and USFWS would be immediately notified of the occurrence, and these agencies would be consulted on the course of action. No take of these species can occur without obtaining incidental take authorizations under the federal Endangered Species Act and California Endangered Species Act.
- 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.

- California red-legged frog: If presence of California red-legged frog within suitable habitat in the treatment area is assumed or detected during surveys, pre-treatment visual surveys will be performed daily by a qualified biologist prior to implementation of any treatment activities within 300 feet of Class I or Class II WLPZ streams and within or adjacent to other sensitive habitat areas 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-round prior to any activities within 30 feet of Class I or Class II WLPZ streams and within or adjacent to other sensitive habitat areas. 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 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. The specific habitat features used by the frog when detected will be evaluated for habitat retention if habitat retention will meet the project goals. Pieces of large woody debris greater than 12 inches in diameter that need to be moved or treated will be evaluated for CRLF by a qualified biologist. All mechanized equipment 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. No mechanized operations may occur in a Class I or Class II watercourse in which WLPZ protections have been implemented in accordance with SPR HYD-4, or within 30 feet of a Class III WLPZ or adjacent to wet seeps. Handwork may continue in these areas if the area has been surveyed by a qualified biologist no more than 7 days prior to operations. No heavy equipment may be fueled within 65 feet of any watercourse. If CRLF are encountered during treatment, work in the vicinity of the observation would be stopped, USFWS would be immediately notified of the occurrence, and USFWS would be consulted on the appropriate course of action. No take of this species can occur without obtaining incidental take authorization under the federal Endangered Species Act.
- Foothill yellow-legged frog (FYLF): If suitable habitat for foothill yellow-legged frog is present within the treatment area, daily inspection of the treatment area will be performed. Prior to beginning daily inspections, the qualified biologist will conduct a training for project staff covering the identification of FYLF, procedures to follow for daily inspection of habitat features before treatment occurs, and procedures to implement if a frog is present. If a FYLF is present in the treatment area, activities will halt, and a no-disturbance buffer will be established around the frog in which treatment will not occur until the frog has left the area on its own accord. CDFW will be notified if foothill yellow-legged frogs are observed.
- San Francisco garter snake: Any San Francisco garter snake encountered in the treatment areas should not be handled; a no disturbance buffer should be implemented; and the species should be left alone until it leaves the area on its own. All vehicles and equipment staged near suitable garter snake habitat should be checked for the species prior to moving.

- White-tailed kite: If active white-tailed kite nests are found during SPR BIO-10 surveys, a no-disturbance buffer of 0.25 mile will be placed around the nests, and no treatment activities may occur within this buffer until the biologist has determined the chicks have fledged.
- Golden eagle: If active golden eagle nests are found during SPR BIO-10 surveys, a no-disturbance buffer of 1.0 mile will be placed around the nests, and no treatment activities may occur within this buffer until a biologist has determined the chicks have fledged.
- Ringtail: To avoid mortality or injury to ringtail during the maternity season (April 15-June 30), a qualified biologist will conduct a den search in the treatment area within 7 days prior to the start of mechanical and manual treatments. Den structures include hollow logs, rock piles, and large trees greater than 12 inches dbh with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities 12 inches deep). If cavities are found, the qualified biologist will inspect them, if safely accessible, using a cell phone with a flash or a borescope to determine whether a ringtail is present. Large trees with appropriate cavities will be marked with flagging or spray paint for inspection during further surveys and for potential avoidance during the maternity season. The qualified biologist will also search for dens in dense brush and will note any sightings of fleeing adult ringtails. If no active ringtail dens are found during the den survey, daily surveys will be implemented to avoid destruction of active dens and injury or mortality to ringtails that were not detected previously. On the morning of treatment, a qualified biologist will conduct a survey of the area to be treated that week and will search all suitable habitat 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 trees with cavities previously marked by the qualified biologist. On following days, a trained contractor will search all areas previously marked by the qualified biologist for active dens. If an active den is discovered during a daily survey, the qualified 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 treatment activities will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified biologist will confirm that the den is unoccupied before treatment activities resume. If an active den is discovered, CDFW will be notified of the den and buffer location. CDFW will be provided the opportunity to visit the site and provide technical information on the size and shape of the den buffer. Any potential den structures where the biologist is not able to determine occupancy will be retained until the end of the ringtail maternity season (June 30).
- Puma: To avoid mortality or injury to puma, a qualified biologist will conduct a survey of the treatment area for appropriate nursery habitat, which includes caves, large natural cavities in rocky areas, or thickets. The biologist will survey for signs of activity (tracks, scat, prey items) and publicly reported puma sightings near potential nursery habitat to determine whether the area may contain a puma nursery. If nursery habitat is confirmed within the treatment area, a qualified biologist will inspect the suitable nursery habitat in the part of the treatment area scheduled to be treated within 7 days prior to the start of mechanical and manual treatments. If no puma or sign of a nursery is observed, treatment may begin. If signs of a puma nursery are observed, the biologist will use trail cameras, track plates, hair snares, and/or other noninvasive methods for three days and three nights to determine whether the nursery is active. If these methods determine that the nursery is active, a no-disturbance buffer of at least 2,000 feet will be established for a minimum of 10 weeks. Treatment will not occur within this buffer during this time to avoid disturbance, injury, or mortality of pumas.
- Any additional recommendations provided by CDFW or USFWS prior to the implementation of treatment activities would be incorporated into the treatment plan.

## 5 References

- CBFFP (California Board of Forestry and Fire Protection). 2019. *California Vegetation Treatment Program Program Environmental Impact Report*. State Clearinghouse # 2019012052. Prepared for the California Board of Forestry and Fire Protection by Ascent Environmental. November 2019. <https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-programmatic-eir/>.
- CDFW (California Department of Fish and Wildlife). 2021. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. California Natural Resources Agency, Department of Fish And Wildlife. March 20, 2018, with revisions February 3, 2021.
- CDFW. 2022a. California Natural Diversity Database (CNDDDB). RareFind5, Version 5.2.14. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed June 2022. <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx>.
- CDFW. 2022b. "California Natural Communities." Sacramento, California: CDFW, Vegetation Classification and Mapping Program. July 5, 2022. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>.
- CDFW. 2023. "Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project Comments and Recommendation." Letter communication from Robynn Swan, CDFW.
- CNPS (California Native Plant Society). 2022a. Inventory of Rare and Endangered Plants (online edition, v8-030.39). Sacramento, California: CNPS, Rare Plant Program. Accessed June 2022. <http://www.rareplants.cnps.org/>.
- CNPS. 2022b. *A Manual of California Vegetation*, Online Edition. Sacramento, California: CNPS. Accessed June 2022. <https://vegetation.cnps.org>.
- County of Santa Clara. 2006. "Tree Preservation and Removal." February 11, 1997; last updated March 28, 2006. [https://library.municode.com/ca/santa\\_clara\\_county/codes/code\\_of\\_ordinances?nodeId=TITCCODELAUS\\_DIVC16TRPRRE](https://library.municode.com/ca/santa_clara_county/codes/code_of_ordinances?nodeId=TITCCODELAUS_DIVC16TRPRRE).
- County of Santa Clara. 2019. *Sanborn County Park Final Master Plan*. Prepared by PlaceWorks for Santa Clara County Parks. Approved on June 4, 2019. <https://parks.sccgov.org/sites/g/files/exjcpb961/files/sanborn-master-plan-final.pdf>.
- Google Earth Pro. 2022. Google Earth Pro (version 7.3.4). Google LCC. Accessed June 2022.
- Hatfield, R., S. Jepsen, S. Foltz Jordan, M. Blackburn, A. Code. 2018. A Petition to the State of California Fish and Game Commission to list Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as endangered under the California Endangered Species Act. The Xerces Society, Portland, Oregon. October 2018. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline>.
- Jepson Flora Project. 2022. *Jepson eFlora*. Berkeley, California: University of California. Accessed June 2022. <https://ucjeps.berkeley.edu/eflora/>.

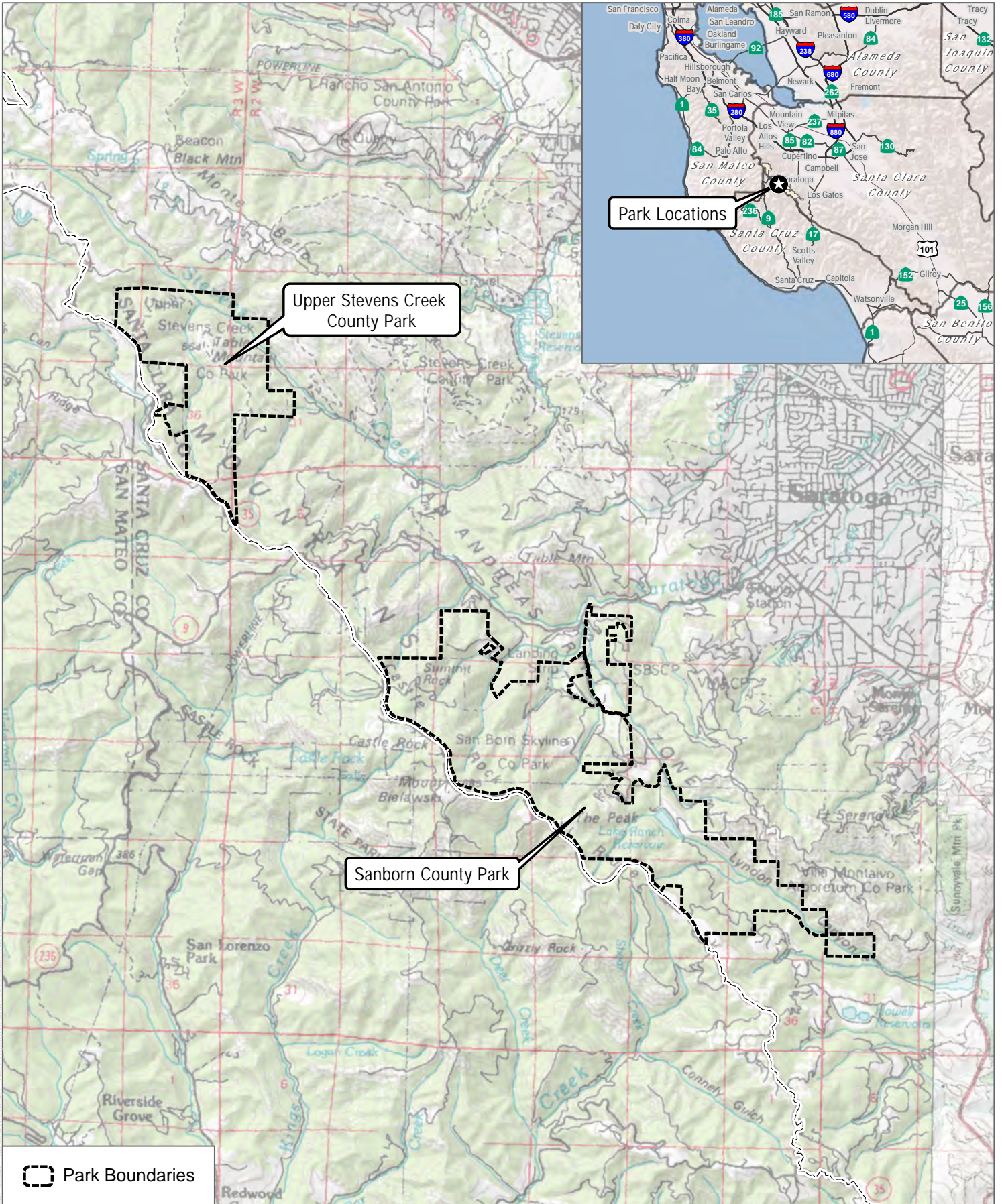
MEMORANDUM

SUBJECT: BIOLOGICAL TECHNICAL MEMORANDUM, SANBORN AND UPPER STEVENS CREEK COUNTY PARKS FOREST HEALTH PLAN PROJECT

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- Mack, D. M., W. P. Ritchie, S. K. Nelson, E. Kuo-Harrison, P. Harrison, and T. E. Hamer. 2003. *Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research*. Pacific Seabird Group Marbled Murrelet Technical Committee, January 2003. <https://www.fws.gov/sites/default/files/documents/survey-protocol-for-marbled-murrelet.pdf>.
- Master, L., D. Faber-Langendoen, R. Bittman, G.A. Hammerson, B. Heidel, L. Ramsay, K. Snow, A. Teucher, and A. Tomaino. 2012. *NatureServe Conservation Status Assessments: Factors for Evaluating Species and Ecosystem Risk*. NatureServe, Arlington, VA. April 2012. [https://www.natureserve.org/sites/default/files/natureserveconservationstatusfactors\\_apr12.pdf](https://www.natureserve.org/sites/default/files/natureserveconservationstatusfactors_apr12.pdf).
- Santa Clara County Parks. 2012. *Sanborn-Skyline County Parks Interim Natural Resource Plan*. Prepared by T. Smith for Santa Clara County Parks.
- Santa Clara Valley Habitat Agency (SCVHA). 2017. *Santa Clara Valley Habitat Plan Minor Modification: Condition 16. Least Bell's Vireo survey requirements*. June 2017. [https://scv-habitatagency.org/DocumentCenter/View/1013/HPM2017-02\\_LBVI\\_FINAL](https://scv-habitatagency.org/DocumentCenter/View/1013/HPM2017-02_LBVI_FINAL).
- USDA (U.S. Department of Agriculture). 2022. Web Soil Survey. USDA, Natural Resources Conservation Service, Soil Survey Staff. Accessed June 2022. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- USFWS (U.S. Fish and Wildlife Service). 2022a. IPaC (Information for Planning and Consultation) Search. Accessed June 2022. <http://www.fws.gov/data>.
- USFWS. 2022b. National Wetlands Inventory. Accessed June 2022. <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>.
- USFWS. 2020. *Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*. Arcata Fish and Wildlife Office, Arcata, California. October 2020.
- USGS (U.S. Geological Survey). 2022. National Hydrography Dataset: GIS Online viewer. Accessed June 2022. <https://apps.nationalmap.gov/viewer/>.



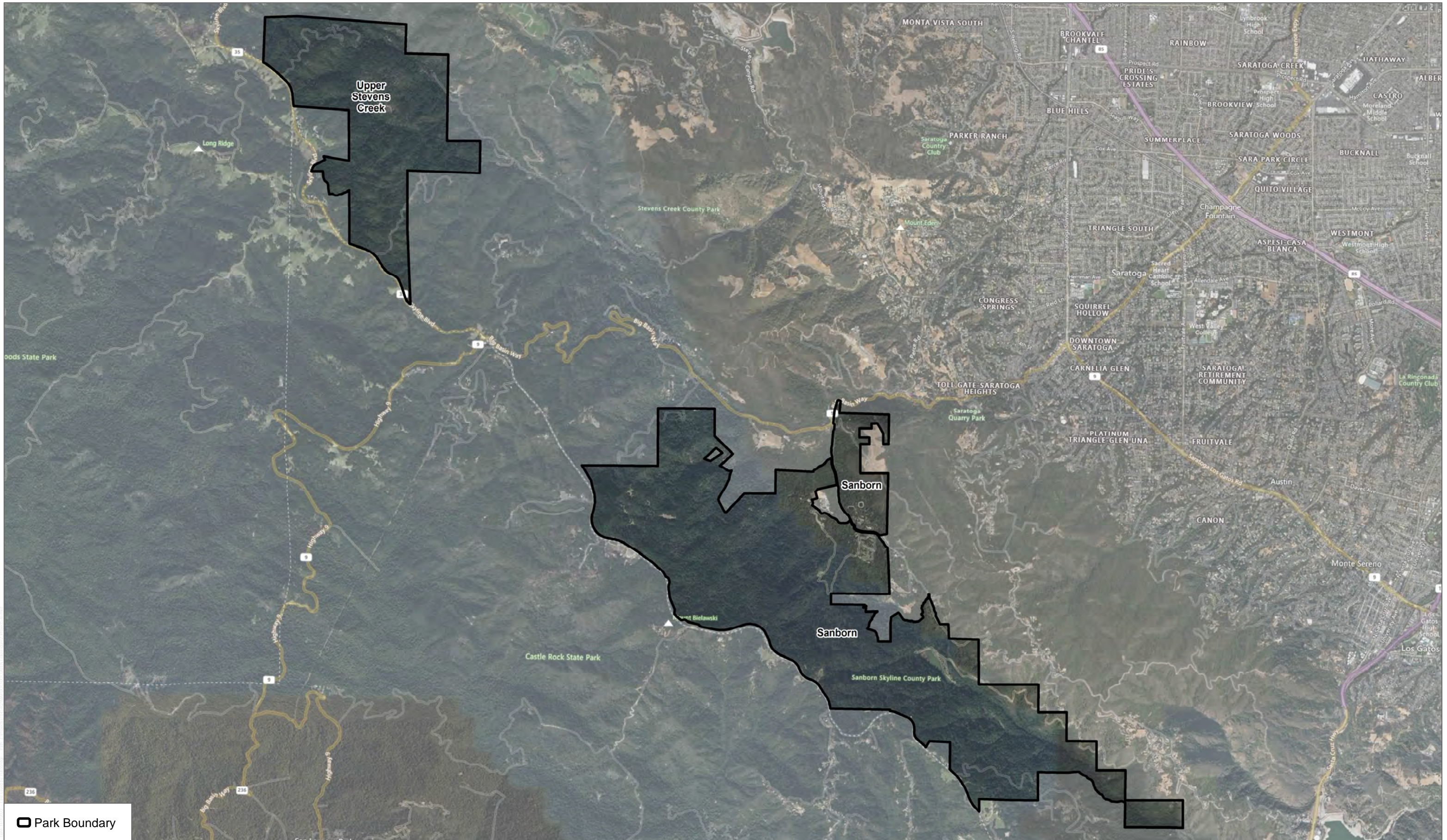


SOURCE: USGS 2020

FIGURE 1

Project Location



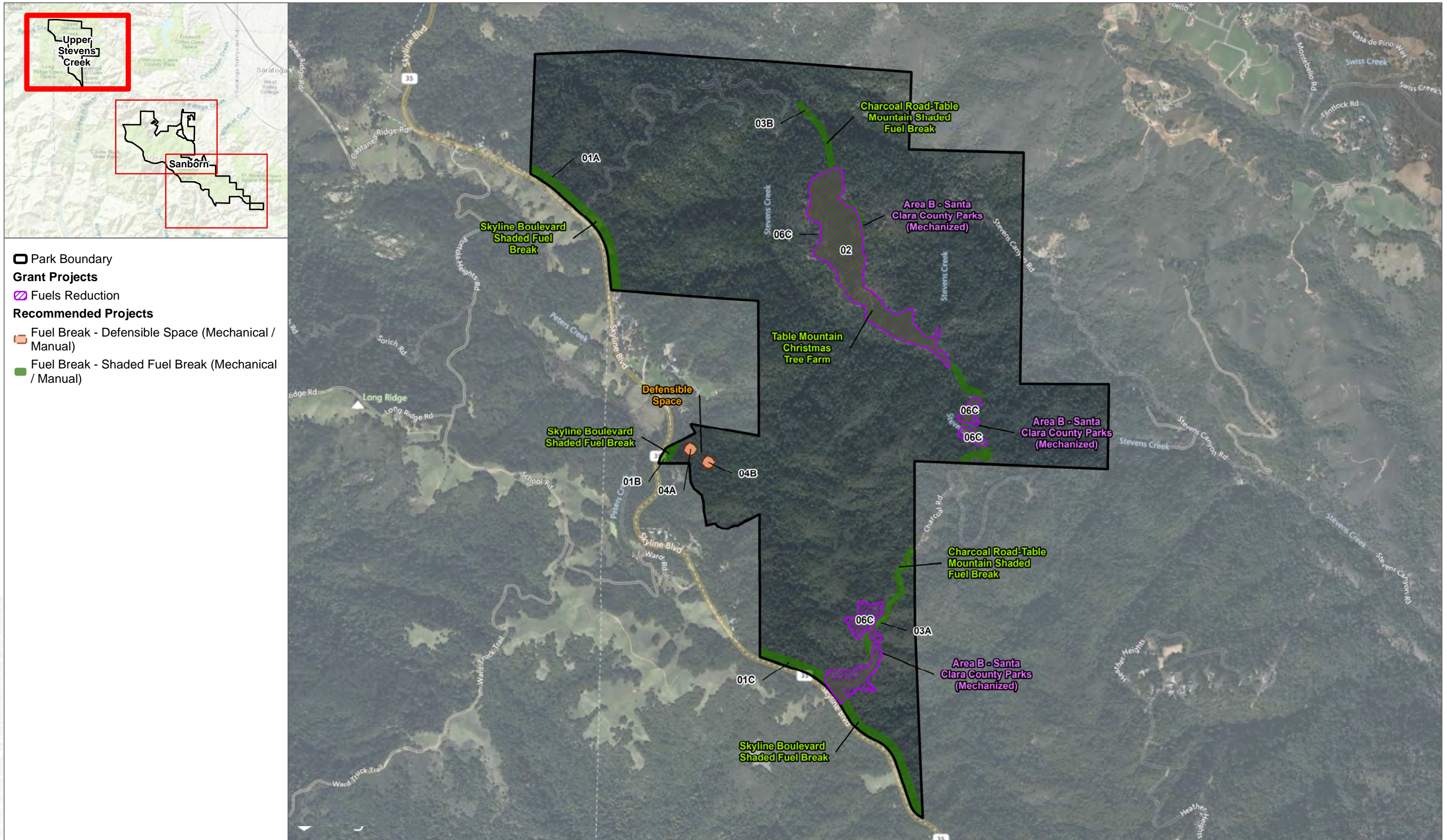


SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 2  
Project Site



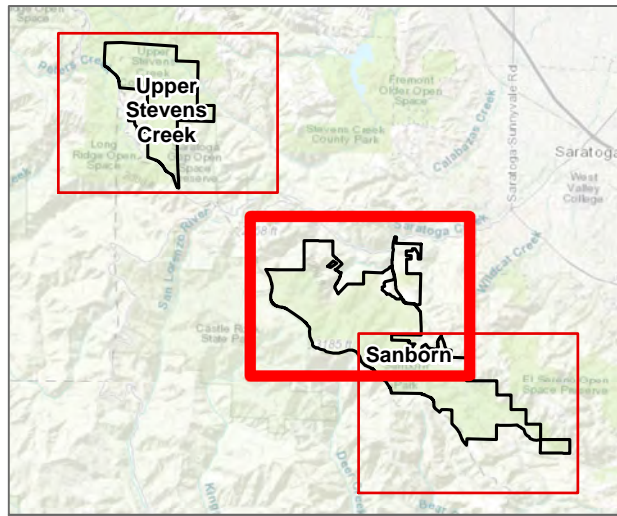


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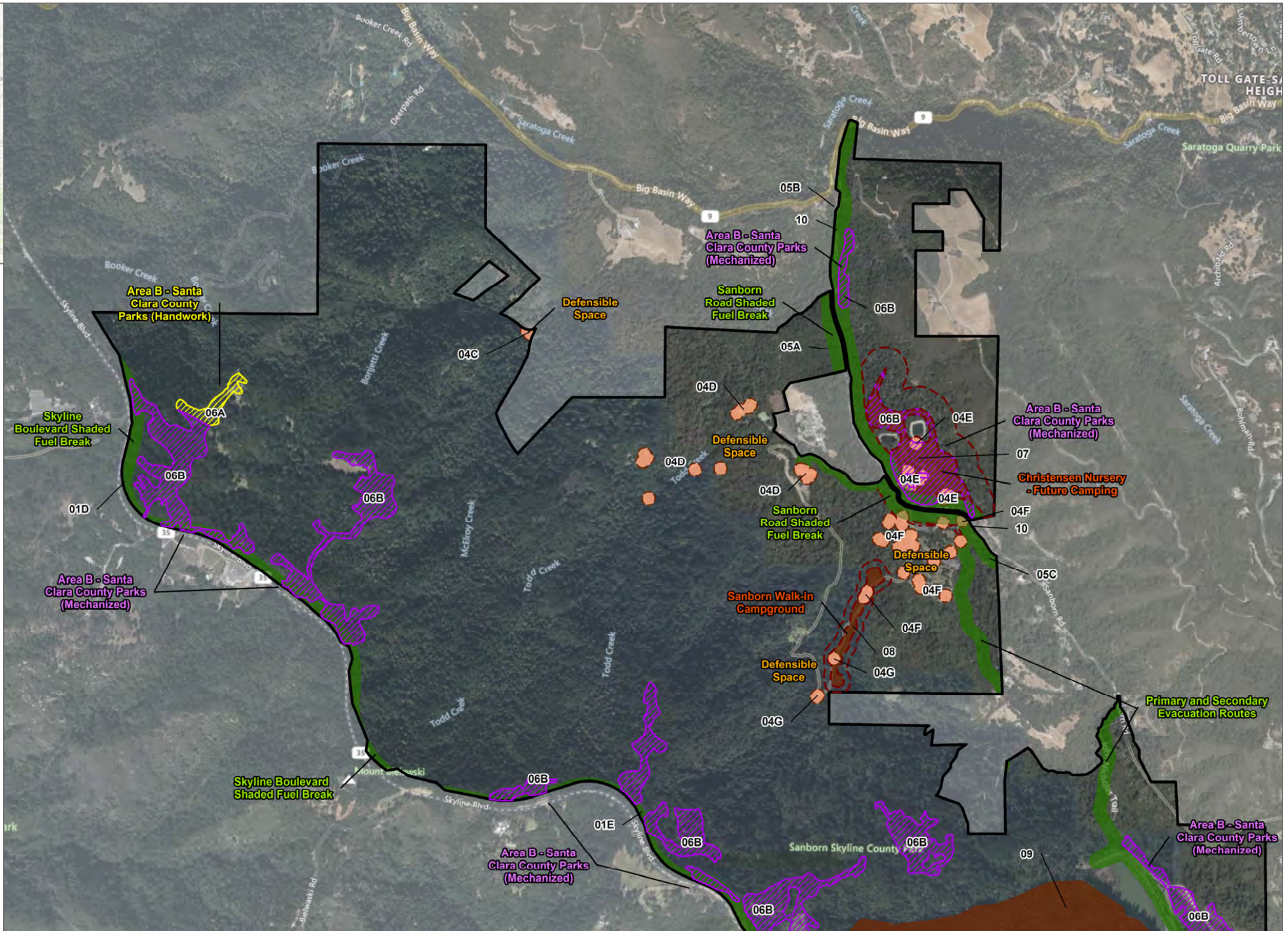


FIGURE 3-1  
Proposed Project





- Park Boundary
- Grant Projects**
- Fuels Reduction
- Fuels Reduction
- Recommended Projects**
- Fuel Break - Defensible Space (Mechanical / Manual)
- Fuel Break - Shaded Fuel Break (Mechanical / Manual)
- Fuels Reduction (Mechanical / Manual)
- 100-foot Campground Buffer (Mechanical / Manual)

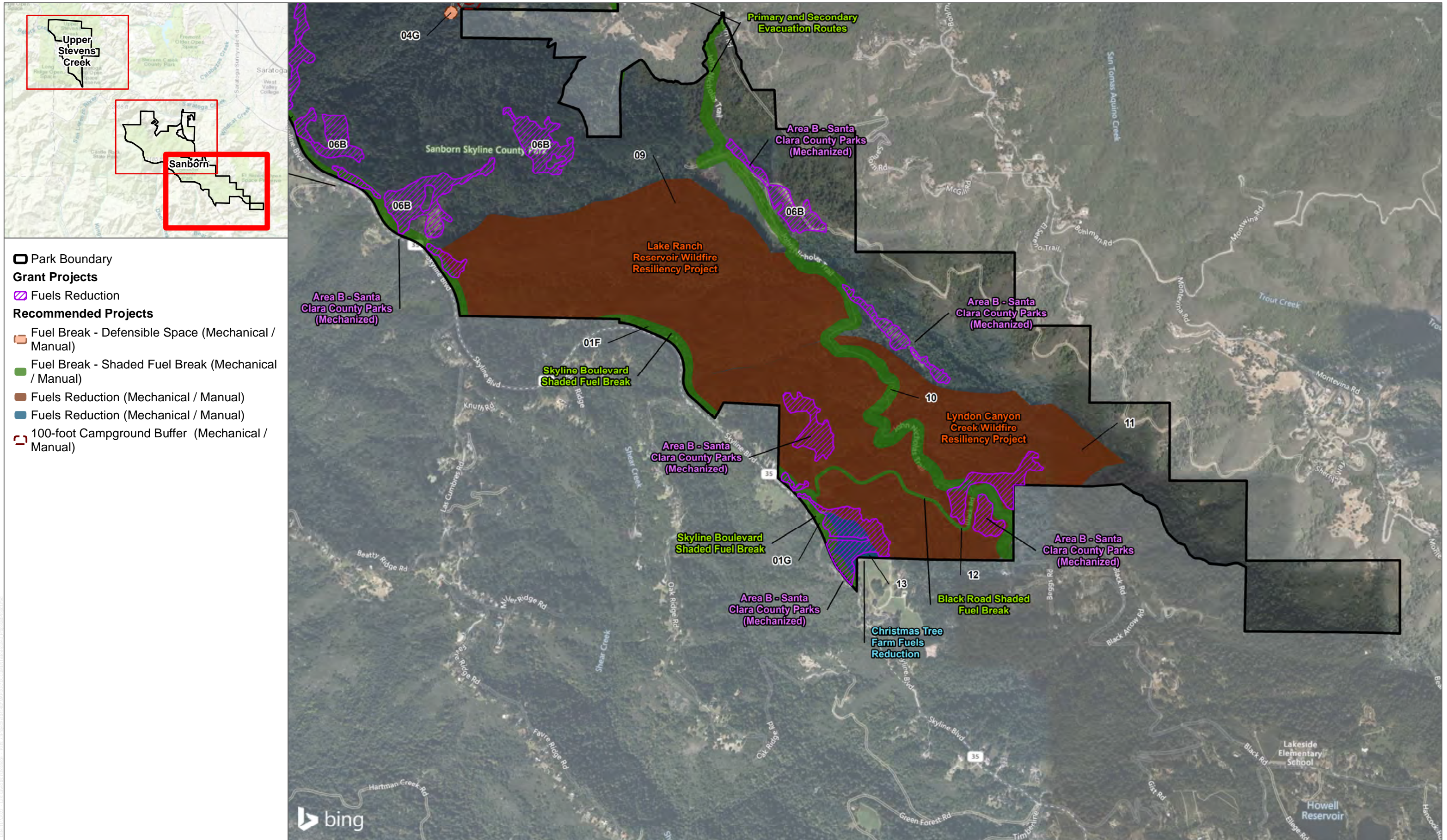


SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 3-2  
Proposed Project



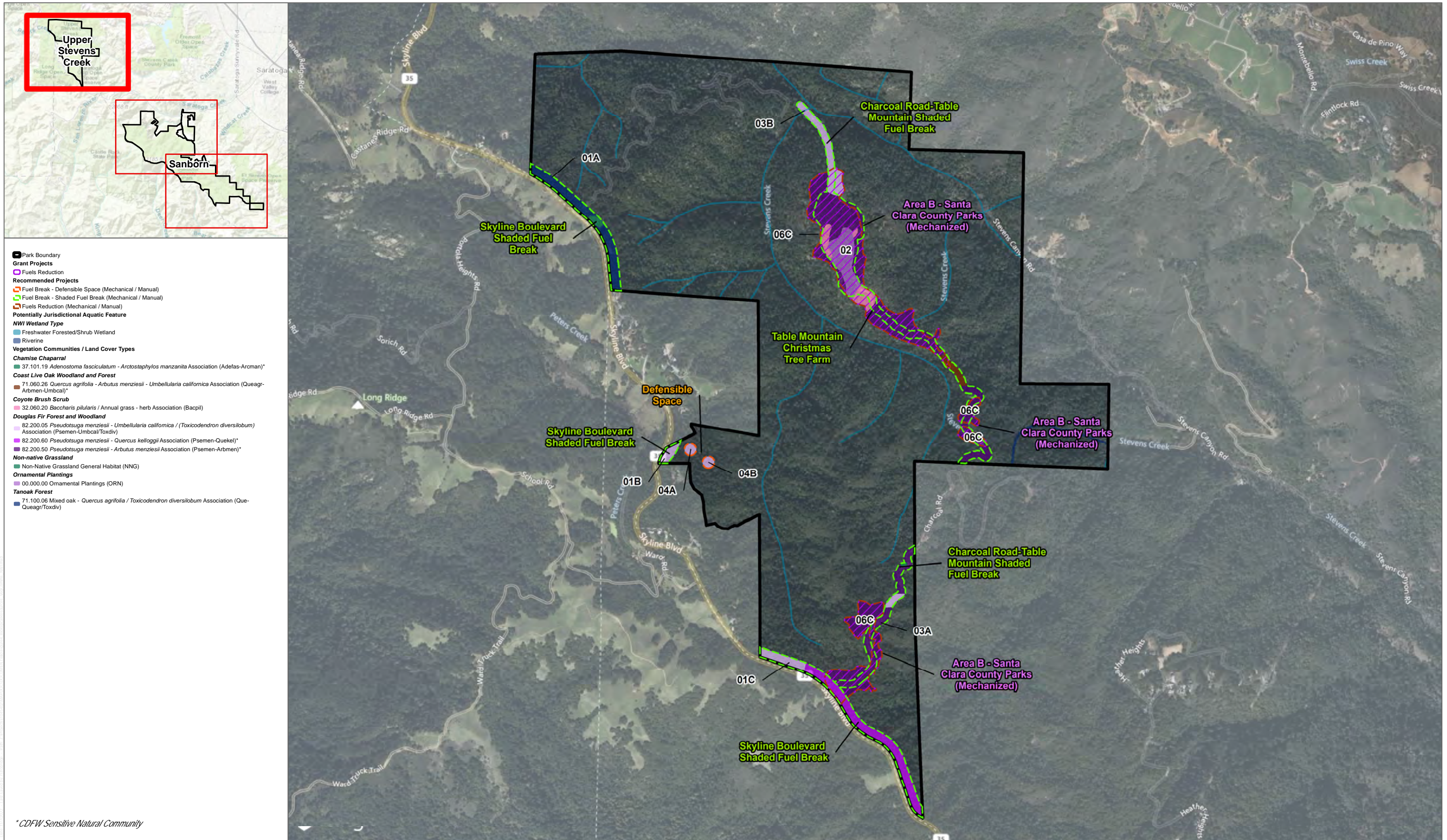


SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 3-3  
Proposed Project





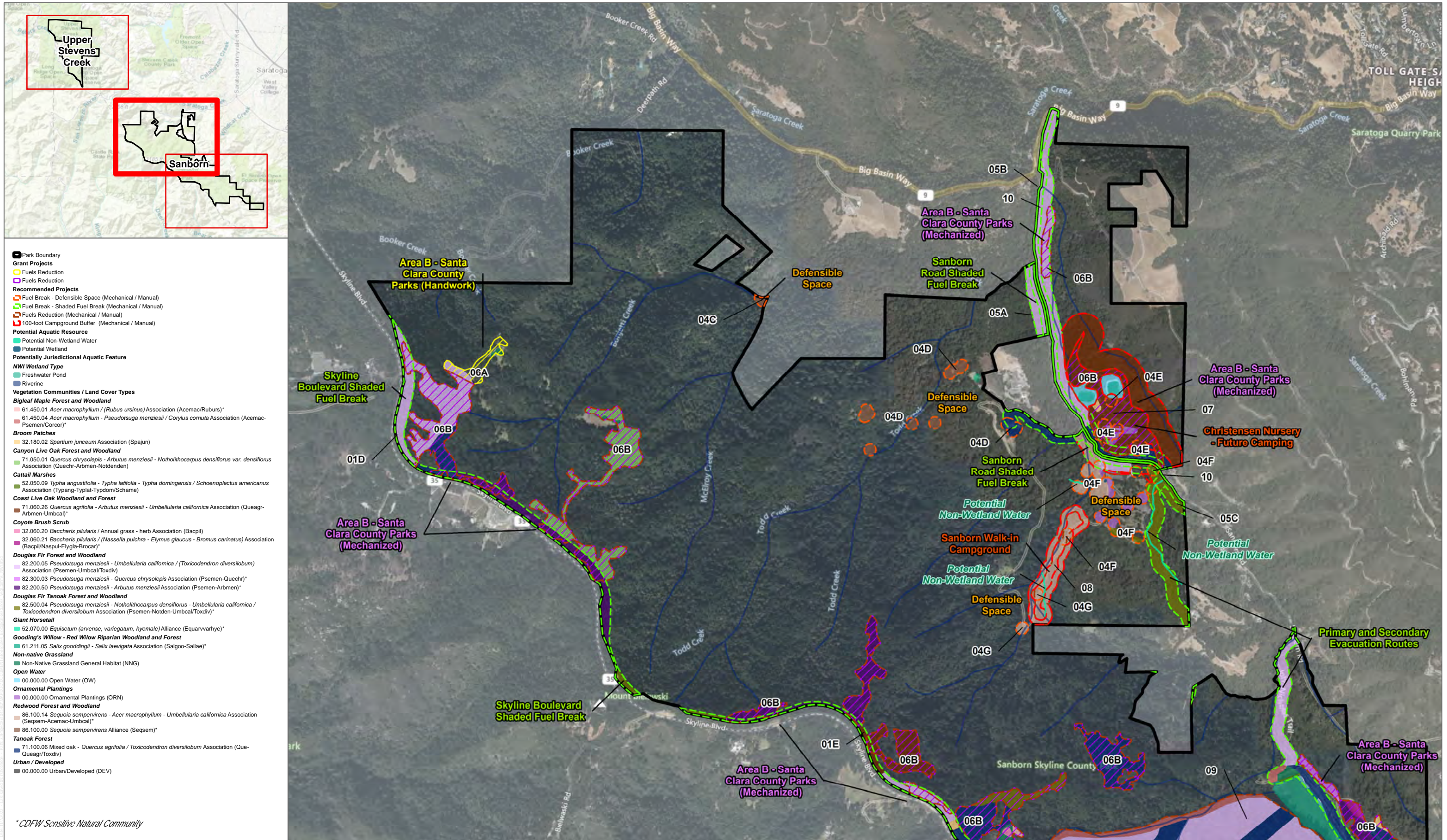
SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 4-1

Vegetation Communities and Potentially Jurisdictional Aquatic Resources  
 Biological Technical Memorandum, Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project





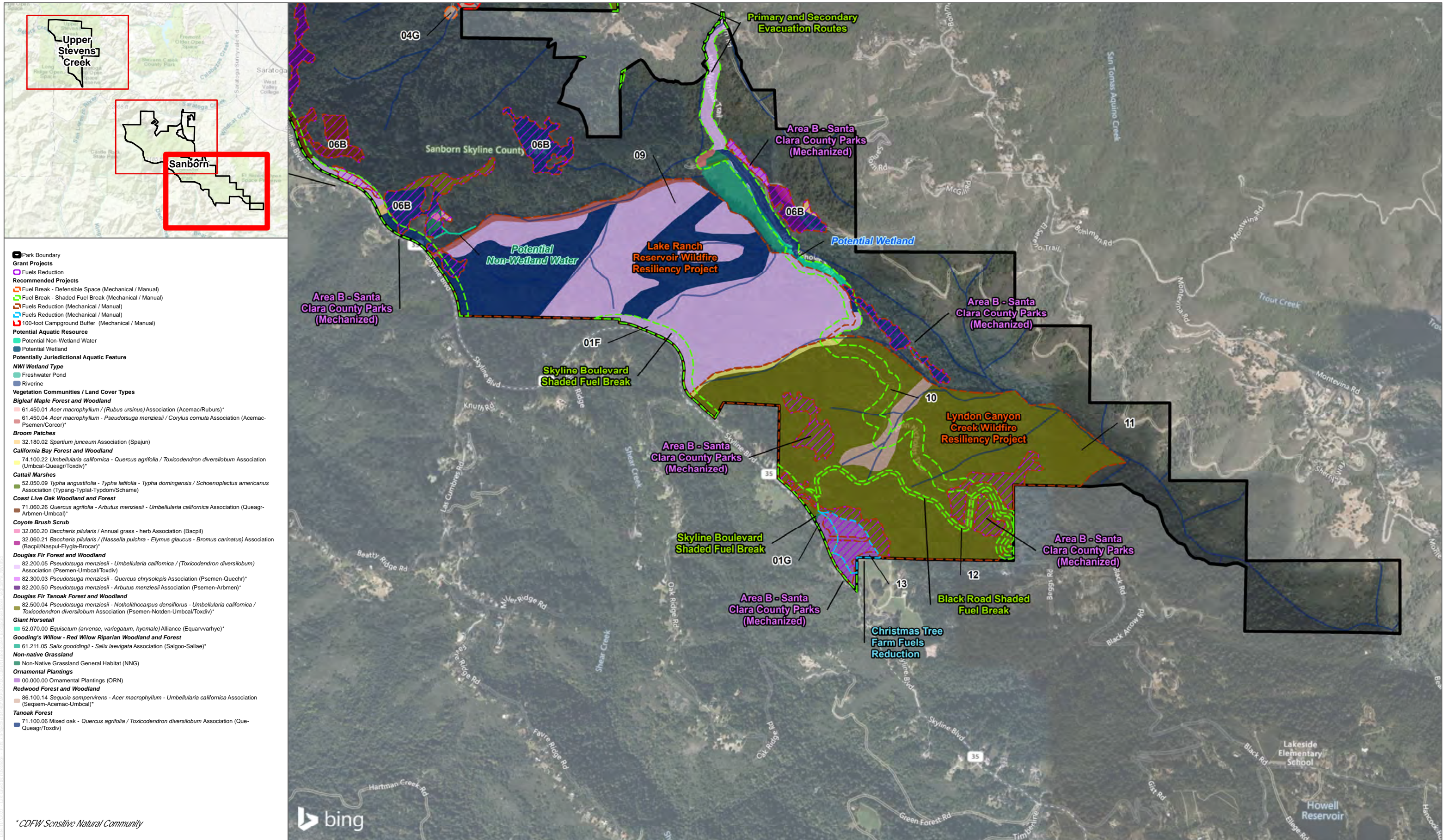
SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 4-2

Vegetation Communities and Potentially Jurisdictional Aquatic Resources  
 Biological Technical Memorandum, Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project





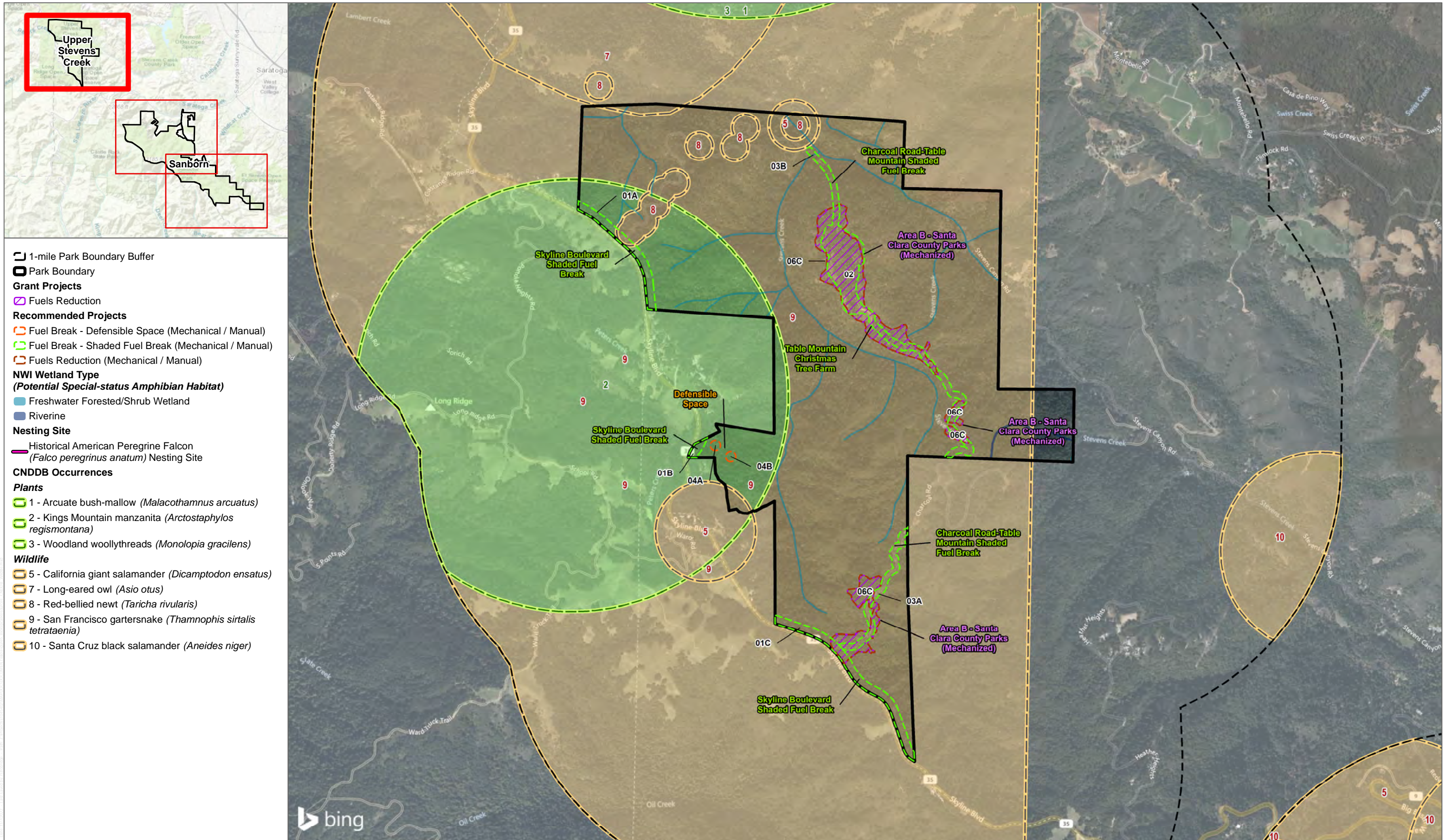
SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 4-3

Vegetation Communities and Potentially Jurisdictional Aquatic Resources  
 Biological Technical Memorandum, Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project



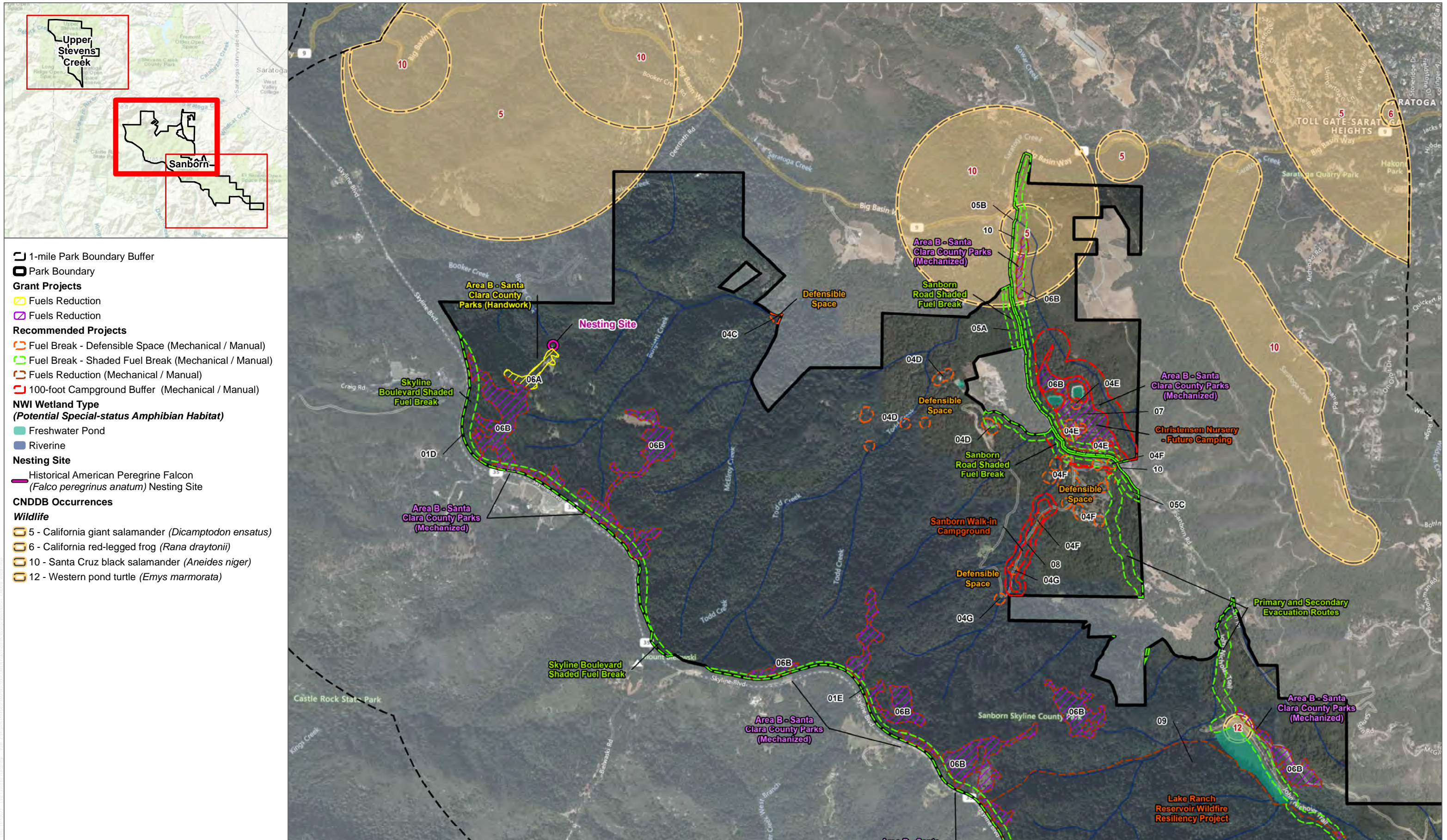


SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 5-1  
Biological Resources - CNDDB Occurrences and Wildlife Observations  
Biological Technical Memorandum, Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project



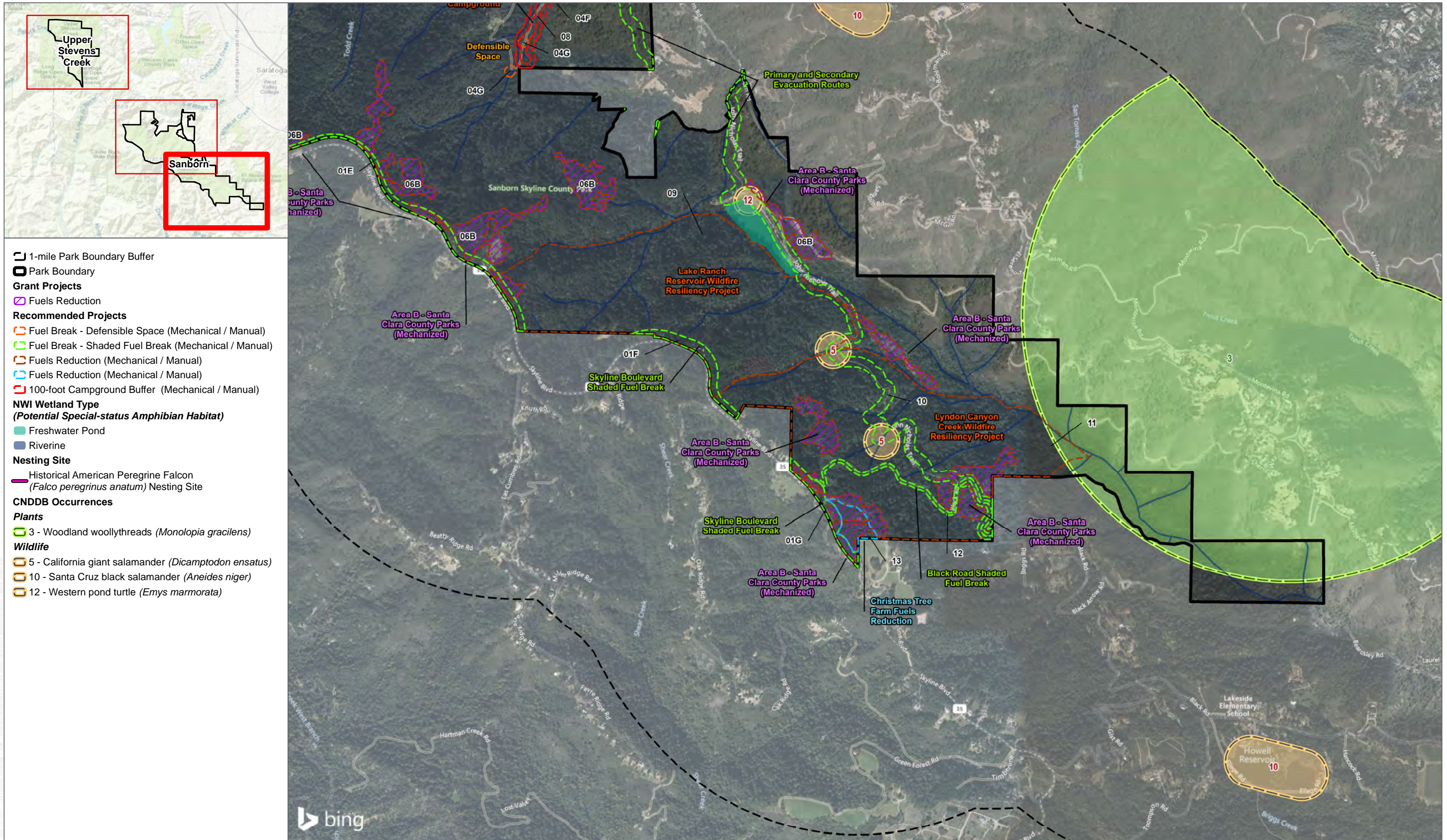


SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 5-2  
Biological Resources - CNDDDB Occurrences and Wildlife Observations  
Biological Technical Memorandum, Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project





SOURCE: Bing Maps 2021, Santa Clara County 2022



FIGURE 5-3



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# **Attachment A**

## Database Searches





# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



**Query Criteria:** Quad (Castle Rock Ridge (3712221) OR Mindego Hill (3712232) OR Cupertino (3712231) OR Big Basin (3712222) OR Los Gatos (3712128)) AND Taxonomic Group (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Ambystoma californiense pop. 1</i> California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
<i>Aneides niger</i> Santa Cruz black salamander	AAAAD01070	None	None	G3	S3	SSC
<i>Anomobryum julaceum</i> slender silver moss	NBMUS80010	None	None	G5?	S2	4.2
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Arctostaphylos andersonii</i> Anderson's manzanita	PDERI04030	None	None	G2	S2	1B.2
<i>Arctostaphylos glutinosa</i> Schreiber's manzanita	PDERI040G0	None	None	G1	S1	1B.2
<i>Arctostaphylos ohloneana</i> Ohlone manzanita	PDERI042Y0	None	None	G1	S1	1B.1
<i>Arctostaphylos regismontana</i> Kings Mountain manzanita	PDERI041C0	None	None	G2	S2	1B.2
<i>Arctostaphylos silvicola</i> Bonny Doon manzanita	PDERI041F0	None	None	G1	S1	1B.2
<i>Asio otus</i> long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Bombus caliginosus</i> obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
<i>Bombus crotchii</i> Crotch bumble bee	IIHYM24480	None	None	G2	S1S2	



Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Bombus occidentalis</i></b> western bumble bee	IIHYM24250	None	None	G2G3	S1	
<b><i>Brachyramphus marmoratus</i></b> marbled murrelet	ABNNN06010	Threatened	Endangered	G3	S2	
<b><i>Calasellus californicus</i></b> An isopod	ICMAL34010	None	None	G2	S2	
<b><i>Calyptridium parryi var. hesseae</i></b> Santa Cruz Mountains pussypaws	PDPOR09052	None	None	G3G4T2	S2	1B.1
<b><i>Centromadia parryi ssp. congdonii</i></b> Congdon's tarplant	PDAST4R0P1	None	None	G3T1T2	S1S2	1B.1
<b><i>Chorizanthe pungens var. hartwegiana</i></b> Ben Lomond spineflower	PDPGN040M1	Endangered	None	G2T1	S1	1B.1
<b><i>Chorizanthe robusta var. robusta</i></b> robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
<b><i>Cirsium fontinale var. campylon</i></b> Mt. Hamilton thistle	PDAST2E163	None	None	G2T2	S2	1B.2
<b><i>Clarkia concinna ssp. automixa</i></b> Santa Clara red ribbons	PDONA050A1	None	None	G5?T3	S3	4.3
<b><i>Collinsia multicolor</i></b> San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
<b><i>Corynorhinus townsendii</i></b> Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
<b><i>Dicamptodon ensatus</i></b> California giant salamander	AAAAH01020	None	None	G2G3	S2S3	SSC
<b><i>Dipodomys venustus venustus</i></b> Santa Cruz kangaroo rat	AMAFD03042	None	None	G4T1	S1	
<b><i>Dirca occidentalis</i></b> western leatherwood	PDTHY03010	None	None	G2	S2	1B.2
<b><i>Dudleya abramsii ssp. setchellii</i></b> Santa Clara Valley dudleya	PDCRA040Z0	Endangered	None	G4T2	S2	1B.1
<b><i>Elanus leucurus</i></b> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<b><i>Emys marmorata</i></b> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<b><i>Erethizon dorsatum</i></b> North American porcupine	AMAFJ01010	None	None	G5	S3	
<b><i>Eriophyllum latilobum</i></b> San Mateo woolly sunflower	PDAST3N060	Endangered	Endangered	G1	S1	1B.1
<b><i>Falco peregrinus anatum</i></b> American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
<b><i>Fissidens pauperculus</i></b> minute pocket moss	NBMUS2W0U0	None	None	G3?	S2	1B.2



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Fritillaria liliacea</i></b> fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
<b><i>Grimmia torenii</i></b> Toren's grimmia	NBMUS32330	None	None	G2	S2	1B.3
<b><i>Grimmia vaginulata</i></b> vaginulate grimmia	NBMUS32340	None	None	G3	S1	1B.1
<b><i>Hesperevax sparsiflora var. brevifolia</i></b> short-leaved evax	PDASTE5011	None	None	G4T3	S3	1B.2
<b><i>Hesperocyparis abramsiana var. abramsiana</i></b> Santa Cruz cypress	PGCUP04081	Threatened	Endangered	G1T1	S1	1B.2
<b><i>Hesperocyparis abramsiana var. butanoensis</i></b> Butano Ridge cypress	PGCUP04082	Threatened	Endangered	G1T1	S1	1B.2
<b><i>Hoita strobilina</i></b> Loma Prieta hoita	PDFAB5Z030	None	None	G2?	S2?	1B.1
<b><i>Lasiurus cinereus</i></b> hoary bat	AMACC05030	None	None	G3G4	S4	
<b><i>Legenere limosa</i></b> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<b><i>Lessingia micradenia var. glabrata</i></b> smooth lessingia	PDAST5S062	None	None	G2T2	S2	1B.2
<b><i>Malacothamnus arcuatus</i></b> arcuate bush-mallow	PDMAL0Q0E0	None	None	G2Q	S2	1B.2
<b><i>Monolopia gracilens</i></b> woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2
<b><i>Myotis yumanensis</i></b> Yuma myotis	AMACC01020	None	None	G5	S4	
<b><i>N. Central Coast Calif. Roach/Stickleback/Steelhead Stream</i></b> N. Central Coast Calif. Roach/Stickleback/Steelhead Stream	CARA2633CA	None	None	GNR	SNR	
<b><i>Neotoma fuscipes annectens</i></b> San Francisco dusky-footed woodrat	AMAFF08082	None	None	G5T2T3	S2S3	SSC
<b><i>North Central Coast Drainage Sacramento Sucker/Roach River</i></b> North Central Coast Drainage Sacramento Sucker/Roach River	CARA2623CA	None	None	GNR	SNR	
<b><i>North Central Coast Steelhead/Sculpin Stream</i></b> North Central Coast Steelhead/Sculpin Stream	CARA2637CA	None	None	GNR	SNR	
<b><i>Northern Interior Cypress Forest</i></b> Northern Interior Cypress Forest	CTT83220CA	None	None	G2	S2.2	
<b><i>Oncorhynchus kisutch pop. 4</i></b> coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G5T2Q	S2	
<b><i>Oncorhynchus mykiss irideus pop. 8</i></b> steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	



Selected Elements by Scientific Name  
California Department of Fish and Wildlife  
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Orthotrichum kellmanii</i></b> Kellman's bristle moss	NBMUS56190	None	None	G1	S1	1B.2
<b><i>Pandion haliaetus</i></b> osprey	ABNKC01010	None	None	G5	S4	WL
<b><i>Pedicularis dudleyi</i></b> Dudley's lousewort	PDSCR1K180	None	Rare	G2	S2	1B.2
<b><i>Penstemon rattanii</i> var. <i>kleei</i></b> Santa Cruz Mountains beardtongue	PDSCR1L5B1	None	None	G4T2	S2	1B.2
<b><i>Pentachaeta bellidiflora</i></b> white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
<b><i>Piperia candida</i></b> white-flowered rein orchid	PMORC1X050	None	None	G3	S3	1B.2
<b><i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i></b> Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
<b><i>Plagiobothrys glaber</i></b> hairless popcornflower	PDBOR0V0B0	None	None	GX	SX	1A
<b><i>Progne subis</i></b> purple martin	ABPAU01010	None	None	G5	S3	SSC
<b><i>Rana boylei</i></b> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
<b><i>Rana draytonii</i></b> California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
<b><i>Sagittaria sanfordii</i></b> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<b><i>Sanicula saxatilis</i></b> rock sanicle	PDAP11Z0H0	None	Rare	G2	S2	1B.2
<b><i>Senecio aphanactis</i></b> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<b><i>Speyeria adiate adiate</i></b> unsilvered fritillary	IILEPJ6143	None	None	G1G2T1	S1	
<b><i>Stebbinsoseris decipiens</i></b> Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
<b><i>Streptanthus albidus</i> ssp. <i>peramoenus</i></b> most beautiful jewelflower	PDBRA2G012	None	None	G2T2	S2	1B.2
<b><i>Taricha rivularis</i></b> red-bellied newt	AAAAF02020	None	None	G2	S2	SSC
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Thamnophis sirtalis tetrataenia</i></b> San Francisco gartersnake	ARADB3613B	Endangered	Endangered	G5T2Q	S2	FP
<b><i>Trifolium buckwestiorum</i></b> Santa Cruz clover	PDFAB402W0	None	None	G2	S2	1B.1





**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



<b>Species</b>	<b>Element Code</b>	<b>Federal Status</b>	<b>State Status</b>	<b>Global Rank</b>	<b>State Rank</b>	<b>Rare Plant Rank/CDFW SSC or FP</b>
<b><i>Trifolium polyodon</i></b> Pacific Grove clover	PDFAB402H0	None	Rare	G1	S1	1B.1
<b><i>Trimerotropis infantilis</i></b> Zayante band-winged grasshopper	IIORT36030	Endangered	None	G1	S1	
<b><i>Usnea longissima</i></b> Methuselah's beard lichen	NLLEC5P420	None	None	G4	S4	4.2

**Record Count: 81**

## CNPS Rare Plant Inventory



## Search Results

60 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3712221:3712232:3712231:3712222:3712128]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	GENERAL HABITATS	MICRO HABITATS	LOWEST ELEVATION (M)	HIGHEST ELEVATION (M)	LOWEST ELEVATION (FT)	HIGHEST ELEVATION (FT)	CA ENDEMIC	DATE ADDED
<a href="#">Amsinckia lunaris</a>	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	Cismontane woodland, Coastal bluff scrub, Valley and foothill grassland		3	500	10	1640	Yes	1974-01-01
<a href="#">Anomobryum julaceum</a>	slender silver moss	Bryaceae	moss		None	None	G5?	S2	4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest	Roadsides (usually)	100	1000	330	3280		2001-01-01
<a href="#">Arabis blepharophylla</a>	coast rockcress	Brassicaceae	perennial herb	Feb-May	None	None	G4	S4	4.3	Broadleafed upland forest, Coastal bluff scrub, Coastal prairie, Coastal scrub	Rocky	3	1100	10	3610	Yes	1974-01-01
<a href="#">Arctostaphylos andersonii</a>	Anderson's manzanita	Ericaceae	perennial evergreen shrub	Nov-May	None	None	G2	S2	1B.2	Broadleafed upland forest, Chaparral, North Coast coniferous forest	Edges, Openings	60	760	195	2495	Yes	1974-01-01
<a href="#">Arctostaphylos glutinosa</a>	Schreiber's manzanita	Ericaceae	perennial evergreen shrub	Mar-Apr(Nov)	None	None	G1	S1	1B.2	Chaparral, Closed-cone coniferous forest		170	685	560	2245	Yes	1974-01-01
<a href="#">Arctostaphylos ohloneana</a>	Ohlone manzanita	Ericaceae	evergreen shrub	Feb-Mar	None	None	G1	S1	1B.1	Closed-cone coniferous forest, Coastal scrub		450	530	1475	1740	Yes	2009-04-02
<a href="#">Arctostaphylos regismontana</a>	Kings Mountain manzanita	Ericaceae	perennial evergreen shrub	Dec-Apr	None	None	G2	S2	1B.2	Broadleafed upland forest, Chaparral, North Coast coniferous forest	Granitic, Sandstone	305	730	1000	2395	Yes	1994-01-01
<a href="#">Arctostaphylos silvicola</a>	Bonny Doon manzanita	Ericaceae	perennial evergreen shrub	Jan-Mar	None	None	G1	S1	1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest		120	600	395	1970	Yes	1974-01-01

<a href="#"><u>Calandrinia breweri</u></a>	Brewer's calandrinia	Montiaceae	annual herb	(Jan)Mar-Jun	None	None	G4	S4	4.2	Chaparral, Coastal scrub	Burned areas, Disturbed areas, Loam (sometimes), Sandy (sometimes)	10	1220	35	4005		1994-01-01
<a href="#"><u>Calyptridium parryi var. hesseae</u></a>	Santa Cruz Mountains pussypaws	Montiaceae	annual herb	May-Aug	None	None	G3G4T2	S2	1B.1	Chaparral, Cismontane woodland	Gravelly (sometimes), Openings, Sandy (sometimes)	305	1530	1000	5020	Yes	1984-01-01
<a href="#"><u>Centromadia parryi ssp. congdonii</u></a>	Congdon's tarplant	Asteraceae	annual herb	May-Oct(Nov)	None	None	G3T1T2	S1S2	1B.1	Valley and foothill grassland		0	230	0	755	Yes	1994-01-01
<a href="#"><u>Chorizanthe pungens var. hartwegiana</u></a>	Ben Lomond spineflower	Polygonaceae	annual herb	Apr-Jul	FE	None	G2T1	S1	1B.1	Lower montane coniferous forest		90	610	295	2000	Yes	1994-01-01
<a href="#"><u>Chorizanthe robusta var. robusta</u></a>	robust spineflower	Polygonaceae	annual herb	Apr-Sep	FE	None	G2T1	S1	1B.1	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub	Gravelly (sometimes), Sandy (sometimes)	3	300	10	985	Yes	1980-01-01
<a href="#"><u>Cirsium fontinale var. campylon</u></a>	Mt. Hamilton thistle	Asteraceae	perennial herb	(Feb)Apr-Oct	None	None	G2T2	S2	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland	Seeps, Serpentinite	100	890	330	2920	Yes	1974-01-01
<a href="#"><u>Clarkia breweri</u></a>	Brewer's clarkia	Onagraceae	annual herb	Apr-Jun	None	None	G4	S4	4.2	Chaparral, Cismontane woodland, Coastal scrub	Serpentinite (often)	215	1115	705	3660	Yes	1974-01-01
<a href="#"><u>Clarkia concinna ssp. automixa</u></a>	Santa Clara red ribbons	Onagraceae	annual herb	(Apr)May-Jun(Jul)	None	None	G5?T3	S3	4.3	Chaparral, Cismontane woodland		90	1500	295	4920	Yes	1994-01-01
<a href="#"><u>Clarkia lewisii</u></a>	Lewis' clarkia	Onagraceae	annual herb	May-Jul	None	None	G4	S4	4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal scrub		30	1195	100	3920	Yes	1980-01-01
<a href="#"><u>Collinsia multicolor</u></a>	San Francisco collinsia	Plantaginaceae	annual herb	(Feb)Mar-May	None	None	G2	S2	1B.2	Closed-cone coniferous forest, Coastal scrub	Serpentinite (sometimes)	30	275	100	900	Yes	1974-01-01
<a href="#"><u>Cypripedium fasciculatum</u></a>	clustered lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4	S4	4.2	Lower montane coniferous forest, North Coast coniferous forest	Seeps (usually), Serpentinite (usually), Streambanks	100	2435	330	7990		1980-01-01

<a href="#"><i>Dirca occidentalis</i></a>	western leatherwood	Thymelaeaceae	perennial deciduous shrub	Jan-Mar(Apr)	None	None	G2	S2	1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Closed-cone coniferous forest, North Coast coniferous forest, Riparian forest, Riparian woodland	Mesic	25	425	80	1395	Yes	1974-01-01
<a href="#"><i>Dudleya abramsii ssp. setchellii</i></a>	Santa Clara Valley dudleya	Crassulaceae	perennial herb	Apr-Oct	FE	None	G4T2	S2	1B.1	Cismontane woodland, Valley and foothill grassland	Rocky, Serpentinite	60	535	195	1755	Yes	1988-01-01
<a href="#"><i>Eriophyllum latilobum</i></a>	San Mateo woolly sunflower	Asteraceae	perennial herb	May-Jun	FE	CE	G1	S1	1B.1	Cismontane woodland, Coastal scrub, Lower montane coniferous forest		45	330	150	1085	Yes	1974-01-01
<a href="#"><i>Erysimum franciscanum</i></a>	San Francisco wallflower	Brassicaceae	perennial herb	Mar-Jun	None	None	G3	S3	4.2	Chaparral, Coastal dunes, Coastal scrub, Valley and foothill grassland	Granitic (often), Roadsides (sometimes), Serpentinite (often)	0	550	0	1805	Yes	1974-01-01
<a href="#"><i>Fissidens pauperculus</i></a>	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2	North Coast coniferous forest		10	1024	35	3360		2001-01-01
<a href="#"><i>Fritillaria liliacea</i></a>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	G2	S2	1B.2	Cismontane woodland, Coastal prairie, Coastal scrub, Valley and foothill grassland	Serpentinite (often)	3	410	10	1345	Yes	1974-01-01
<a href="#"><i>Galium andrewsii ssp. gatense</i></a>	phlox-leaf serpentine bedstraw	Rubiaceae	perennial herb	Apr-Jul	None	None	G5T3	S3	4.2	Chaparral, Cismontane woodland, Lower montane coniferous forest	Rocky, Serpentinite	150	1450	490	4755	Yes	1994-01-01
<a href="#"><i>Grimmia torenii</i></a>	Toren's grimmia	Grimmiaceae	moss		None	None	G2	S2	1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest	Carbonate, Openings, Rocky, Volcanic	325	1160	1065	3805	Yes	2014-05-14
<a href="#"><i>Grimmia vaginulata</i></a>	vaginulate grimmia	Grimmiaceae	moss		None	None	G3	S1	1B.1	Chaparral	Carbonate, Rocky	685	685	2245	2245		2014-05-14
<a href="#"><i>Hesperevax sparsiflora var. brevifolia</i></a>	short-leaved evax	Asteraceae	annual herb	Mar-Jun	None	None	G4T3	S3	1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie		0	215	0	705		1994-01-01



<a href="#"><i>Hesperocyparis abramsiana</i> var. <i>abramsiana</i></a>	Santa Cruz cypress	Cupressaceae	perennial evergreen tree		FT	CE	G1T1	S1	1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest	Granitic (sometimes), Sandstone (sometimes)	280	800	920	2625	Yes	1974-01-01
<a href="#"><i>Hesperocyparis abramsiana</i> var. <i>butanoensis</i></a>	Butano Ridge cypress	Cupressaceae	perennial evergreen tree	Oct	FT	CE	G1T1	S1	1B.2	Chaparral, Closed-cone coniferous forest, Lower montane coniferous forest	Sandstone	400	490	1310	1610	Yes	2011-12-19
<a href="#"><i>Hoita strobilina</i></a>	Loma Prieta hoita	Fabaceae	perennial herb	May-Jul(Aug-Oct)	None	None	G2?	S2?	1B.1	Chaparral, Cismontane woodland, Riparian woodland	Mesic, Serpentinite (usually)	30	860	100	2820	Yes	2001-01-01
<a href="#"><i>Hosackia gracilis</i></a>	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2	Broadleafed upland forest, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Valley and foothill grassland	Roadsides	0	700	0	2295		2004-01-01
<a href="#"><i>Iris longipetala</i></a>	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May(Jun)	None	None	G3	S3	4.2	Coastal prairie, Lower montane coniferous forest, Meadows and seeps	Mesic	0	600	0	1970	Yes	2006-10-12
<a href="#"><i>Legenere limosa</i></a>	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Vernal pools		1	880	5	2885	Yes	1974-01-01
<a href="#"><i>Leptosiphon acicularis</i></a>	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Chaparral, Cismontane woodland, Coastal prairie, Valley and foothill grassland		55	1500	180	4920	Yes	1994-01-01

<a href="#"><i>Leptosiphon ambiguus</i></a>	serpentine leptosiphon	Polemoniaceae	annual herb	Mar-Jun	None	None	G4	S4	4.2	Cismontane woodland, Coastal scrub, Valley and foothill grassland	Serpentinite (usually)	120	1130	395	3710	Yes	1994-01-01
<a href="#"><i>Leptosiphon grandiflorus</i></a>	large-flowered leptosiphon	Polemoniaceae	annual herb	Apr-Aug	None	None	G3G4	S3S4	4.2	Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Valley and foothill grassland	Sandy (usually)	5	1220	15	4005	Yes	1994-01-01
<a href="#"><i>Lessingia hololeuca</i></a>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Broadleafed upland forest, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	Clay, Serpentinite	15	305	50	1000	Yes	1994-01-01
<a href="#"><i>Lessingia micradenia</i> var. <i>glabrata</i></a>	smooth lessingia	Asteraceae	annual herb	(Apr-Jun)Jul-Nov	None	None	G2T2	S2	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland	Roadsides (often), Serpentinite	120	420	395	1380	Yes	1994-01-01
<a href="#"><i>Lessingia tenuis</i></a>	spring lessingia	Asteraceae	annual herb	May-Jul	None	None	G4	S4	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest	Openings	300	2150	985	7055	Yes	1974-01-01
<a href="#"><i>Malacothamnus arcuatus</i></a>	arcuate bush-mallow	Malvaceae	perennial deciduous shrub	Apr-Sep	None	None	G2Q	S2	1B.2	Chaparral, Cismontane woodland		15	355	50	1165	Yes	1974-01-01
<a href="#"><i>Monolopia gracilens</i></a>	woodland woollythreads	Asteraceae	annual herb	(Feb)Mar-Jul	None	None	G3	S3	1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland	Serpentinite	100	1200	330	3935	Yes	2010-04-06
<a href="#"><i>Orthotrichum kellmanii</i></a>	Kellman's bristle moss	Orthotrichaceae	moss	Jan-Feb	None	None	G1	S1	1B.2	Chaparral, Cismontane woodland	Carbonate Sandstone	343	685	1125	2245	Yes	2007-08-16

<a href="#"><u><i>Pedicularis dudleyi</i></u></a>	Dudley's lousewort	Orobanchaceae	perennial herb	Apr-Jun	None	CR	G2	S2	1B.2	Chaparral, Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland	60	900	195	2955	Yes	1974-01-01
<a href="#"><u><i>Penstemon rattanii</i></u></a> var. <a href="#"><u><i>kleei</i></u></a>	Santa Cruz Mountains beardtongue	Plantaginaceae	perennial herb	May-Jun	None	None	G4T2	S2	1B.2	Chaparral, Lower montane coniferous forest, North Coast coniferous forest	400	1100	1310	3610	Yes	1984-01-01
<a href="#"><u><i>Pentachaeta bellidiflora</i></u></a>	white-rayed pentachaeta	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	Cismontane woodland, Valley and foothill grassland	35	620	115	2035	Yes	1974-01-01
<a href="#"><u><i>Piperia candida</i></u></a>	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar)May-Sep	None	None	G3	S3	1B.2	Broadleaved upland forest, Lower montane coniferous forest, North Coast coniferous forest	30	1310	100	4300		1994-01-01
<a href="#"><u><i>Plagiobothrys chorisianus</i></u></a> var. <a href="#"><u><i>chorisianus</i></u></a>	Choris' popcornflower	Boraginaceae	annual herb	Mar-Jun	None	None	G3T1Q	S1	1B.2	Chaparral, Coastal prairie, Coastal scrub	3	160	10	525	Yes	1984-01-01
<a href="#"><u><i>Plagiobothrys chorisianus</i></u></a> var. <a href="#"><u><i>hickmanii</i></u></a>	Hickman's popcornflower	Boraginaceae	annual herb	Apr-Jun	None	None	G3T3Q	S3	4.2	Chaparral, Closed-cone coniferous forest, Coastal scrub, Marshes and swamps, Vernal pools	15	390	50	1280	Yes	2001-01-01
<a href="#"><u><i>Plagiobothrys glaber</i></u></a>	hairless popcornflower	Boraginaceae	annual herb	Mar-May	None	None	GX	SX	1A	Marshes and swamps, Meadows and seeps	15	180	50	590	Yes	1974-01-01
<a href="#"><u><i>Ranunculus lobbii</i></u></a>	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2	Cismontane woodland, North Coast coniferous forest, Valley and foothill grassland, Vernal pools	15	470	50	1540		1974-01-01
<a href="#"><u><i>Sagittaria sanfordii</i></u></a>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Marshes and swamps	0	650	0	2135	Yes	1984-01-01

<a href="#"><i>Sanicula saxatilis</i></a>	rock sanicle	Apiaceae	perennial herb	Apr-May	None	CR	G2	S2	1B.2	Broadleafed upland forest, Chaparral, Valley and foothill grassland	Rocky, Scree, Talus	620	1175	2035	3855	Yes	1974-01-01
<a href="#"><i>Senecio aphanactis</i></a>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	2B.2	Chaparral, Cismontane woodland, Coastal scrub	Alkaline (sometimes)	15	800	50	2625		1994-01-01
<a href="#"><i>Stebbinsoseris decipiens</i></a>	Santa Cruz microseris	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.2	Broadleafed upland forest, Chaparral, Closed-cone coniferous forest, Coastal prairie, Coastal scrub, Valley and foothill grassland	Openings, Serpentinite (sometimes)	10	500	35	1640	Yes	1974-01-01
<a href="#"><i>Streptanthus albidus ssp. peramoenus</i></a>	most beautiful jewelflower	Brassicaceae	annual herb	(Mar)Apr-Sep(Oct)	None	None	G2T2	S2	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland	Serpentinite	95	1000	310	3280	Yes	1988-01-01
<a href="#"><i>Trifolium buckwestiorum</i></a>	Santa Cruz clover	Fabaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.1	Broadleafed upland forest, Cismontane woodland, Coastal prairie	Gravelly	105	610	345	2000	Yes	1994-01-01
<a href="#"><i>Trifolium polyodon</i></a>	Pacific Grove clover	Fabaceae	annual herb	Apr-Jun(Jul)	None	CR	G1	S1	1B.1	Closed-cone coniferous forest, Coastal prairie, Meadows and seeps, Valley and foothill grassland	Granitic (sometimes), Mesic	5	425	15	1395	Yes	1974-01-01
<a href="#"><i>Usnea longissima</i></a>	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2	Broadleafed upland forest, North Coast coniferous forest		50	1460	165	4790		2014-03-01

Showing 1 to 60 of 60 entries

**Suggested Citation:**California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website <https://www.rareplants.cnps.org> [accessed 1 June 2022].**CONTACT US**Send questions and comments to [rareplants@cnps.org](mailto:rareplants@cnps.org).**ABOUT THIS WEBSITE**

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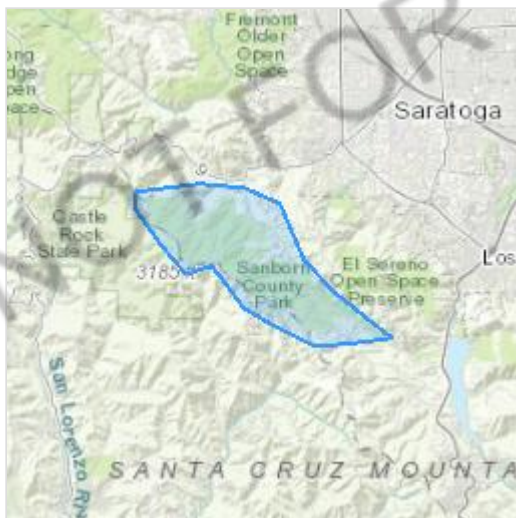
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Santa Clara and Santa Cruz counties, California



## Local offices

Ventura Fish And Wildlife Office

☎ (805) 644-1766

📅 (805) 644-3958

2493 Portola Road, Suite B  
Ventura, CA 93003-7726

<https://www.fws.gov/verobeach/>

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).



2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
<p>California Least Tern <i>Sterna antillarum browni</i>            Wherever found            No critical habitat has been designated for this species.  <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a></p>	Endangered
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i>            Wherever found            There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.  <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a></p>	Endangered
<p>Marbled Murrelet <i>Brachyramphus marmoratus</i>            There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat.  <a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a></p>	Threatened
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i>            Wherever found            There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.  <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a></p>	Endangered

## Reptiles

NAME	STATUS
<p>San Francisco Garter Snake <i>Thamnophis sirtalis tetrataenia</i>            Wherever found            No critical habitat has been designated for this species.  <a href="https://ecos.fws.gov/ecp/species/5956">https://ecos.fws.gov/ecp/species/5956</a></p>	Endangered

## Amphibians

NAME	STATUS
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California Red-legged Frog *Rana draytonii* Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/2891>

California Tiger Salamander *Ambystoma californiense* Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/2076>

Foothill Yellow-legged Frog *Rana boylei* Proposed Threatened

No critical habitat has been designated for this species.

## Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus* Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/321>

Tidewater Goby *Eucyclogobius newberryi* Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/57>

## Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus* Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

Zayante Band-winged Grasshopper *Trimerotropis infantilis* Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/1036>

# Flowering Plants

NAME	STATUS
<p>Ben Lomond Spineflower <i>Chorizanthe pungens</i> var. hartwegiana Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7498">https://ecos.fws.gov/ecp/species/7498</a></p>	Endangered
<p>Ben Lomond Wallflower <i>Erysimum teretifolium</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7429">https://ecos.fws.gov/ecp/species/7429</a></p>	Endangered
<p>Marsh Sandwort <i>Arenaria paludicola</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2229">https://ecos.fws.gov/ecp/species/2229</a></p>	Endangered
<p>Scotts Valley Polygonum <i>Polygonum hickmanii</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/3222">https://ecos.fws.gov/ecp/species/3222</a></p>	Endangered
<p>Scotts Valley Spineflower <i>Chorizanthe robusta</i> var. hartwegii Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/7108">https://ecos.fws.gov/ecp/species/7108</a></p>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
<p>Marbled Murrelet <i>Brachyramphus marmoratus</i> <a href="https://ecos.fws.gov/ecp/species/4467#crithab">https://ecos.fws.gov/ecp/species/4467#crithab</a></p>	Final

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\)](#) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS  
INDICATED FOR A BIRD ON  
YOUR LIST, THE BIRD MAY



BREED IN YOUR PROJECT AREA  
SOMETIME WITHIN THE  
TIMEFRAME SPECIFIED, WHICH  
IS A VERY LIBERAL ESTIMATE  
OF THE DATES INSIDE WHICH  
THE BIRD BREEDS ACROSS ITS  
ENTIRE RANGE. "BREEDS  
ELSEWHERE" INDICATES THAT  
THE BIRD DOES NOT LIKELY  
BREED IN YOUR PROJECT  
AREA.)

#### Allen's Hummingbird *Selasphorus sasin*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9637>

Breeds Feb 1 to Jul 15

#### Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

#### Black Swift *Cypseloides niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Breeds Jun 15 to Sep 10

#### California Thrasher *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

#### Clark's Grebe *Aechmophorus clarkii*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jun 1 to Aug 31

#### Common Yellowthroat *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

<b>Golden Eagle</b> <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a>	Breeds Jan 1 to Aug 31
<b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a>	Breeds Mar 20 to Sep 20
<b>Long-eared Owl</b> <i>asio otus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3631">https://ecos.fws.gov/ecp/species/3631</a>	Breeds Mar 1 to Jul 15
<b>Marbled Godwit</b> <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9481">https://ecos.fws.gov/ecp/species/9481</a>	Breeds elsewhere
<b>Nuttall's Woodpecker</b> <i>Picoides nuttallii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9410">https://ecos.fws.gov/ecp/species/9410</a>	Breeds Apr 1 to Jul 20
<b>Oak Titmouse</b> <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9656">https://ecos.fws.gov/ecp/species/9656</a>	Breeds Mar 15 to Jul 15
<b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>	Breeds May 20 to Aug 31
<b>Wrentit</b> <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

## Yellow-billed Magpie *Pica nuttalli*

Breeds Apr 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9726>

# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Black Swift  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental  
 USA and  
 Alaska.)

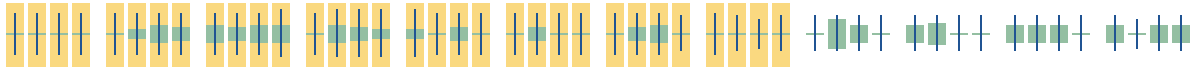
California  
 Thrasher  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental  
 USA and  
 Alaska.)

Clark's Grebe  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental  
 USA and  
 Alaska.)

Common  
 Yellowthroat  
 BCC - BCR (This  
 is a Bird of  
 Conservation  
 Concern (BCC)  
 only in  
 particular Bird  
 Conservation  
 Regions (BCRs)  
 in the  
 continental  
 USA)

NOT FOR CONSULTATION

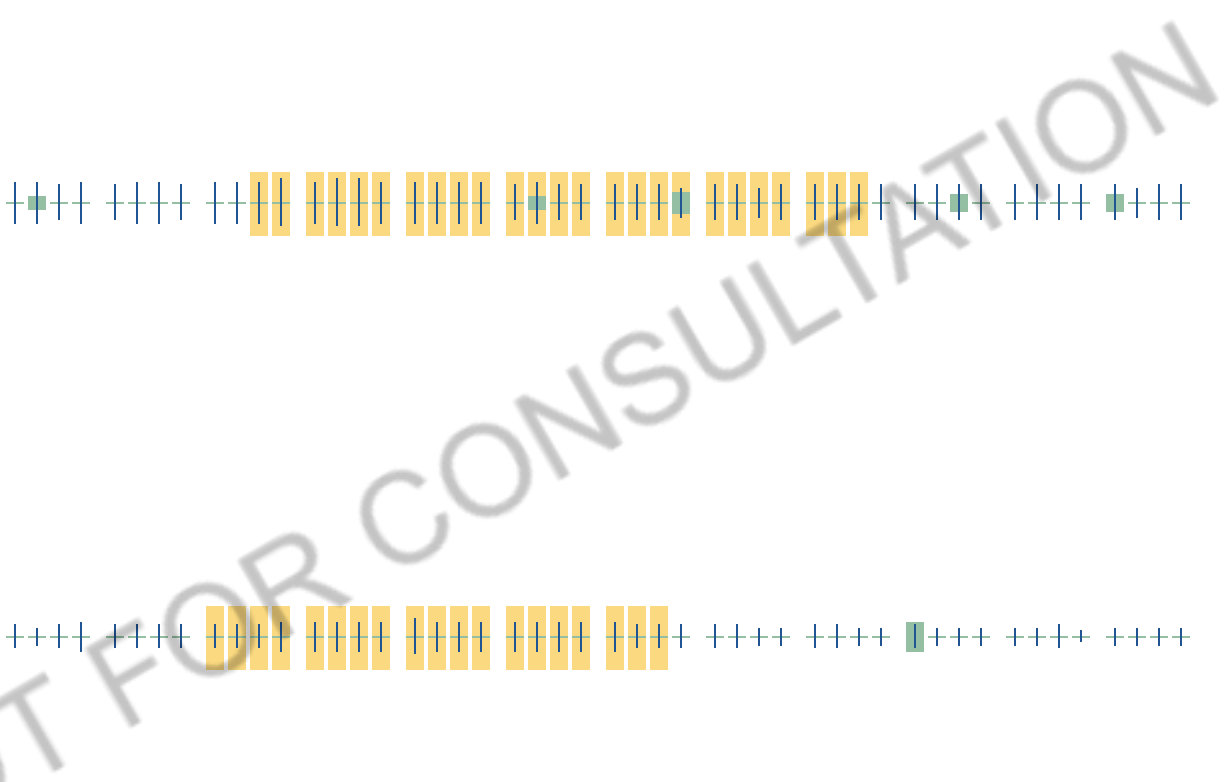
Golden Eagle  
 Non-BCC  
 Vulnerable  
 (This is not a  
 Bird of  
 Conservation  
 Concern (BCC)  
 in this area, but  
 warrants  
 attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities  
 in offshore  
 areas from  
 certain types of  
 development  
 or activities.)



Lawrence's  
 Goldfinch  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental  
 USA and  
 Alaska.)



Long-eared  
 Owl  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental  
 USA and  
 Alaska.)



Marbled Godwit ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Nuttall's Woodpecker ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++

BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

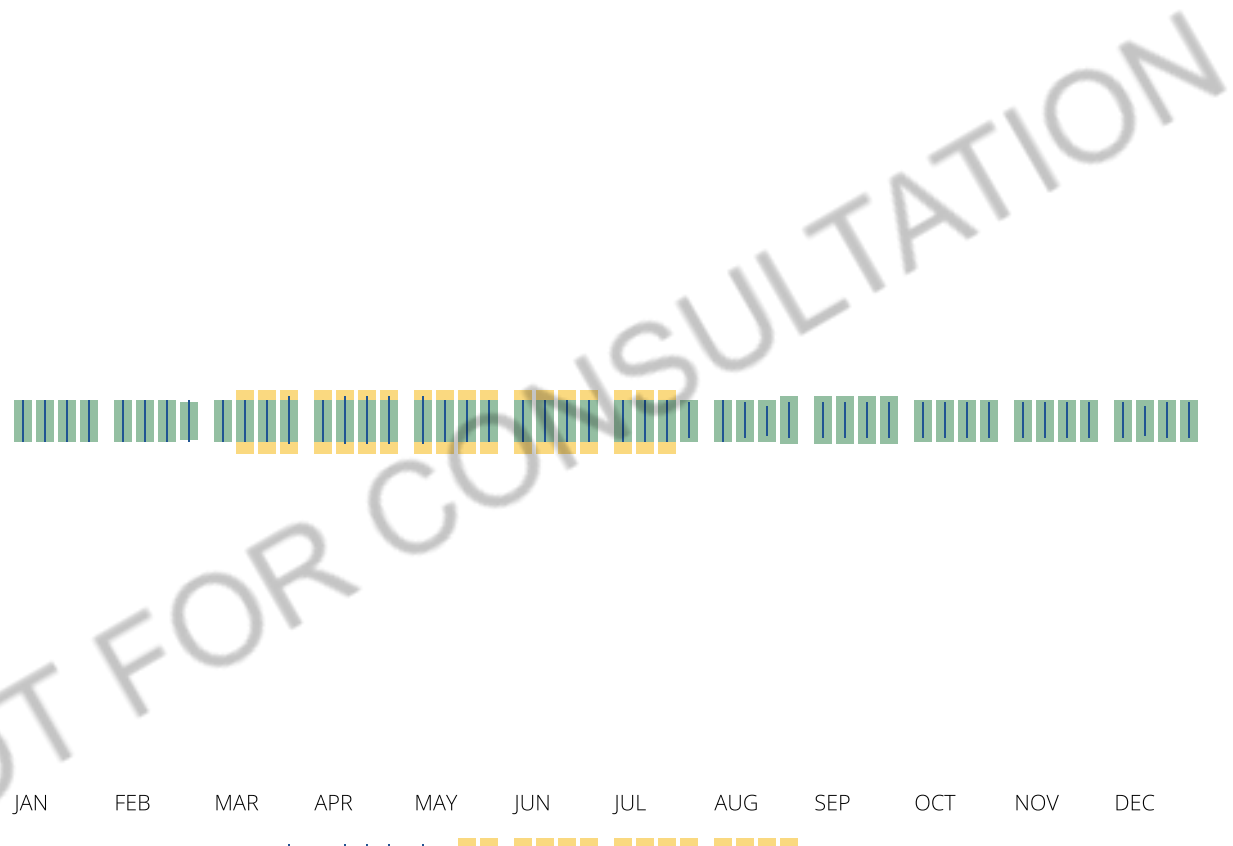
Oak Titmouse ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++

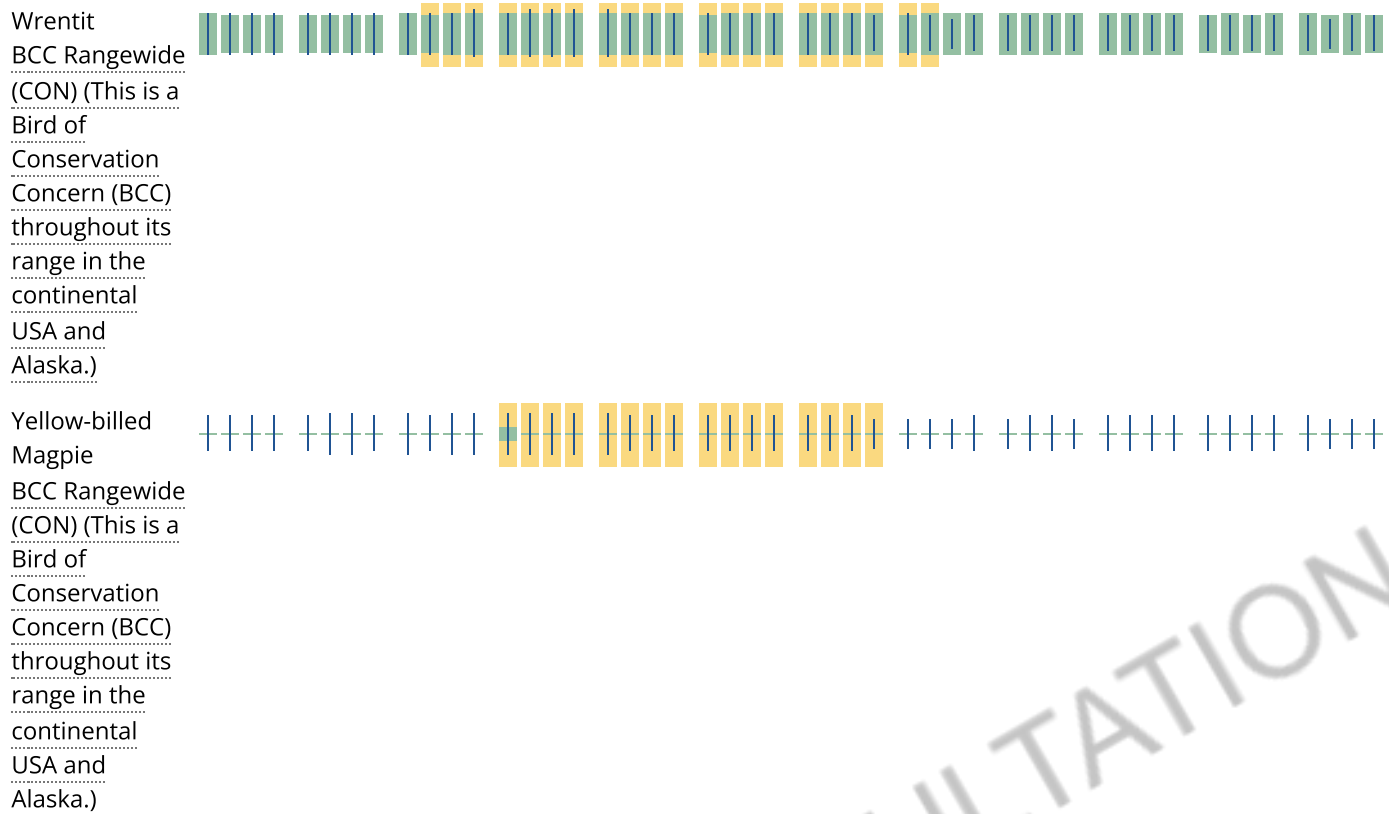
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Olive-sided Flycatcher ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++ ++++++

BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

## What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.



Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

### Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[Palustrine](#)

RIVERINE

[Riverine](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should

seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

San Mateo , Santa Clara , and Santa Cruz counties, California



## Local offices

Ventura Fish And Wildlife Office

☎ (805) 644-1766

📅 (805) 644-3958



2493 Portola Road, Suite B  
Ventura, CA 93003-7726

<https://www.fws.gov/verobeach/>

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📠 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
<p>California Clapper Rail <i>Rallus longirostris obsoletus</i>            Wherever found            No critical habitat has been designated for this species.  <a href="https://ecos.fws.gov/ecp/species/4240">https://ecos.fws.gov/ecp/species/4240</a></p>	Endangered
<p>California Least Tern <i>Sterna antillarum browni</i>            Wherever found            No critical habitat has been designated for this species.  <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a></p>	Endangered
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i>            Wherever found            There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.  <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a></p>	Endangered
<p>Marbled Murrelet <i>Brachyramphus marmoratus</i>            There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.  <a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a></p>	Threatened
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i>            Wherever found            There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available.  <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a></p>	Endangered

## Reptiles

NAME	STATUS
<p>Green Sea Turtle <i>Chelonia mydas</i>            No critical habitat has been designated for this species.  <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a></p>	Threatened

San Francisco Garter Snake *Thamnophis sirtalis tetrataenia* Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5956>

## Amphibians

NAME

STATUS

California Red-legged Frog *Rana draytonii* Threatened

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

<https://ecos.fws.gov/ecp/species/2891>

California Tiger Salamander *Ambystoma californiense* Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/2076>

Foothill Yellow-legged Frog *Rana boylei* Proposed Threatened

No critical habitat has been designated for this species.

## Fishes

NAME

STATUS

Delta Smelt *Hypomesus transpacificus* Threatened

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/321>

Tidewater Goby *Eucyclogobius newberryi* Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/57>

## Insects

NAME

STATUS

**Monarch Butterfly** *Danaus plexippus* **Candidate**  
 Wherever found  
 No critical habitat has been designated for this species.  
<https://ecos.fws.gov/ecp/species/9743>

**Zayante Band-winged Grasshopper** *Trimerotropis infantilis* **Endangered**  
 Wherever found  
 There is **final** critical habitat for this species. The location of the critical habitat is not available.  
<https://ecos.fws.gov/ecp/species/1036>

## Flowering Plants

NAME	STATUS
<b>Ben Lomond Spineflower</b> <i>Chorizanthe pungens</i> var. <i>hartwegiana</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7498">https://ecos.fws.gov/ecp/species/7498</a>	<b>Endangered</b>
<b>Ben Lomond Wallflower</b> <i>Erysimum teretifolium</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7429">https://ecos.fws.gov/ecp/species/7429</a>	<b>Endangered</b>
<b>Marsh Sandwort</b> <i>Arenaria paludicola</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2229">https://ecos.fws.gov/ecp/species/2229</a>	<b>Endangered</b>
<b>San Mateo Woolly Sunflower</b> <i>Eriophyllum latilobum</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7791">https://ecos.fws.gov/ecp/species/7791</a>	<b>Endangered</b>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
------	------



California Red-legged Frog *Rana draytonii*  
<https://ecos.fws.gov/ecp/species/2891#crithab>

Final

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

**Allen's Hummingbird** *Selasphorus sasin*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9637>

Breeds Feb 1 to Jul 15

**Bald Eagle** *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Jan 1 to Aug 31

**Black Swift** *Cypseloides niger*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8878>

Breeds Jun 15 to Sep 10

**California Thrasher** *Toxostoma redivivum*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 1 to Jul 31

**Common Yellowthroat** *Geothlypis trichas sinuosa*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/2084>

Breeds May 20 to Jul 31

<p><b>Golden Eagle</b> <i>Aquila chrysaetos</i></p> <p>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.</p> <p><a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a></p>	Breeds Jan 1 to Aug 31
<p><b>Lawrence's Goldfinch</b> <i>Carduelis lawrencei</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a></p>	Breeds Mar 20 to Sep 20
<p><b>Long-eared Owl</b> <i>asio otus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/3631">https://ecos.fws.gov/ecp/species/3631</a></p>	Breeds Mar 1 to Jul 15
<p><b>Nuttall's Woodpecker</b> <i>Picoides nuttallii</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/9410">https://ecos.fws.gov/ecp/species/9410</a></p>	Breeds Apr 1 to Jul 20
<p><b>Oak Titmouse</b> <i>Baeolophus inornatus</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/9656">https://ecos.fws.gov/ecp/species/9656</a></p>	Breeds Mar 15 to Jul 15
<p><b>Olive-sided Flycatcher</b> <i>Contopus cooperi</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p> <p><a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a></p>	Breeds May 20 to Aug 31
<p><b>Wrentit</b> <i>Chamaea fasciata</i></p> <p>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 10

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

## No Data (—)

A week is marked as having no data if there were no survey events for that week.

## Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



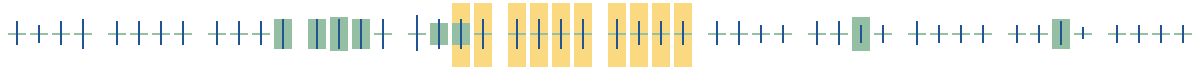
NOT FOR CONSULTATION



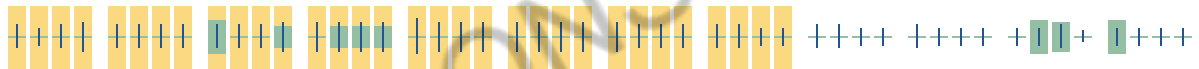
California  
 Thrasher  
 BCC Rangewide  
 (CON) (This is a  
 Bird of  
 Conservation  
 Concern (BCC)  
 throughout its  
 range in the  
 continental  
 USA and  
 Alaska.)



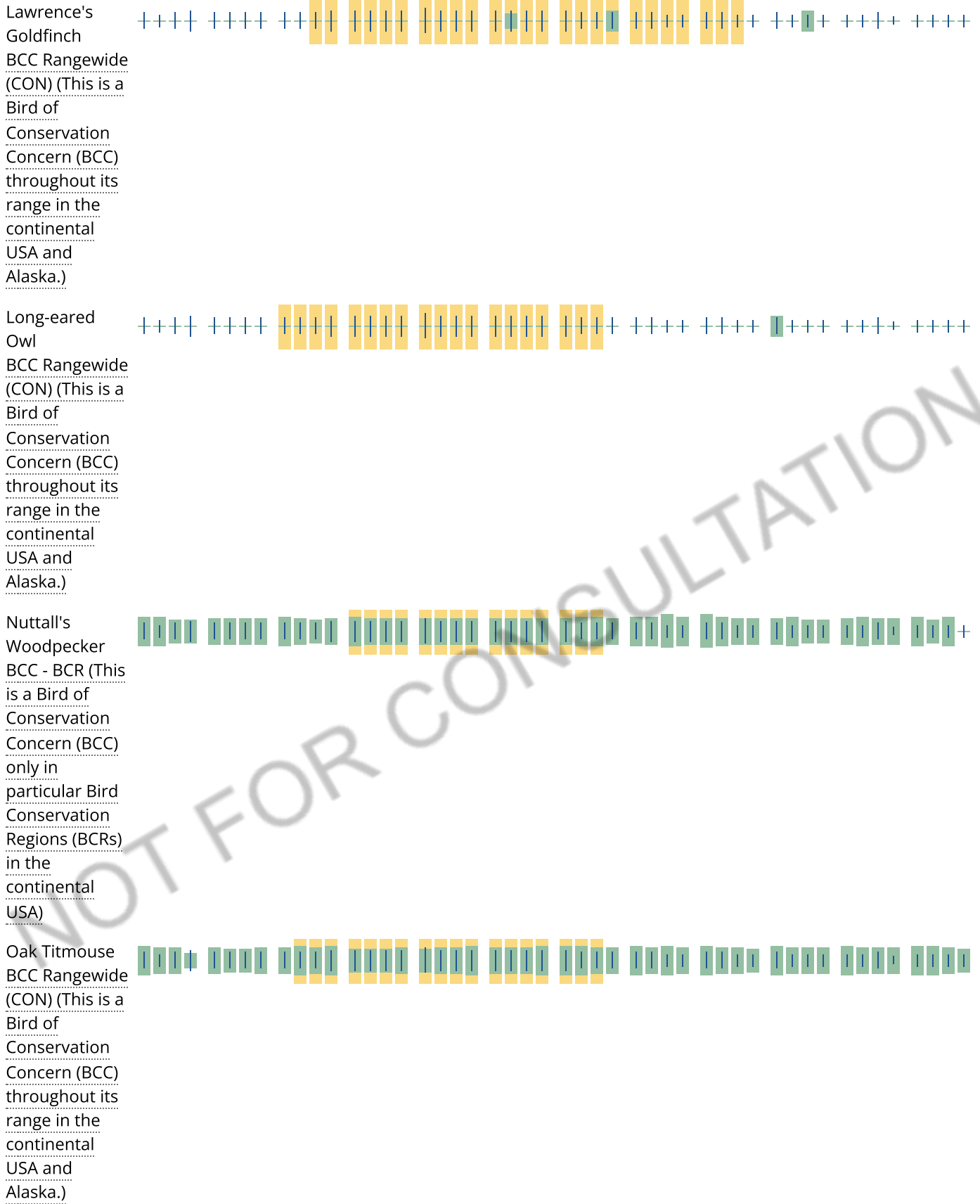
Common  
 Yellowthroat  
 BCC - BCR (This  
 is a Bird of  
 Conservation  
 Concern (BCC)  
 only in  
 particular Bird  
 Conservation  
 Regions (BCRs)  
 in the  
 continental  
 USA)



Golden Eagle  
 Non-BCC  
 Vulnerable  
 (This is not a  
 Bird of  
 Conservation  
 Concern (BCC)  
 in this area, but  
 warrants  
 attention  
 because of the  
 Eagle Act or for  
 potential  
 susceptibilities  
 in offshore  
 areas from  
 certain types of  
 development  
 or activities.)



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NOT FOR CONSULTATION

Olive-sided  
Flycatcher  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental  
USA and  
Alaska.)



Wrentit  
BCC Rangewide  
(CON) (This is a  
Bird of  
Conservation  
Concern (BCC)  
throughout its  
range in the  
continental  
USA and  
Alaska.)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

## What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

## How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

## What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

THERE ARE NO KNOWN COASTAL BARRIERS AT THIS LOCATION.

### Data limitations



The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[Palustrine](#)

RIVERINE

[Riverine](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should

seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

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# **Attachment B**

## Special-Status Plant Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck	None/None/1B.2	Cismontane woodland, coastal bluff scrub, valley and foothill grassland/annual herb/Mar-June/10-1,640	<b>Low potential to occur.</b> The woodland on site provides potentially suitable habitat for this species. There is one previously documented occurrence located northeast of Lexington Reservoir approximately 2 miles east of Sanborn County Park (CDFW 2022).
<i>Arctostaphylos andersonii</i>	Anderson's manzanita	None/None/1B.2	Broadleafed upland forest, chaparral, North Coast coniferous forest; edges, openings/perennial evergreen shrub/Nov-May/195-2,490	<b>Moderate potential to occur.</b> Forest and chaparral on site provide suitable habitat for this species. There are numerous documented occurrences within the Big Basin U.S. Geological Survey 7.5-minute quad, the closest of which is a historical occurrence along Highway 9 approximately 1.5 miles east of Upper Stevens Creek County Park (CDFW 2022).
<i>Arctostaphylos glutinosa</i>	Schreiber's manzanita	None/None/1B.2	Chaparral, closed-cone coniferous forest/perennial evergreen shrub/Mar-Apr(Nov)/560-2,245	<b>Not expected to occur.</b> Although the chaparral and forest provide potentially suitable habitat, there are no suitable soils on site. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Arctostaphylos ohloneana</i>	Ohlone manzanita	None/None/1B.1	Closed-cone coniferous forest, coastal scrub/evergreen shrub/ Feb-Mar/1,475-1,735	<b>Not expected to occur.</b> Although the forest provides potentially suitable habitat, there are no suitable soils on site. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Arctostaphylos regismontana</i>	Kings Mountain manzanita	None/None/1B.2	Broadleafed upland forest, chaparral, North Coast coniferous forest; granitic, sandstone/perennial evergreen shrub/Dec-Apr/ 1,000-2,395	<b>High potential to occur.</b> The forest and chaparral on site provide suitable habitat for this species. This species has been previously documented in Upper Stevens Creek County Park, but the occurrence was observed in the 1920s (CDFW 2022).
<i>Arctostaphylos silvicola</i>	Bonny Doon manzanita	None/None/1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest/perennial evergreen shrub/Jan-Mar/395-1,965	<b>Not expected to occur.</b> The site does not contain any suitable sandy inland marine soils.
<i>Arenaria paludicola</i>	marsh sandwort	FE/SE/1B.1	Marshes and swamps; openings, sandy/perennial stoloniferous herb/May-Aug/10-560	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Calyptidium parryi</i> var. <i>hesseae</i>	Santa Cruz Mountains pussypaws	None/None/1B.1	Chaparral, cismontane woodland; gravelly (sometimes), openings, sandy (sometimes)/annual herb/May-Aug/1,000-5,015	<b>Not expected to occur.</b> Although the chaparral and woodland on site provide potentially suitable habitat for this species, sandy or gravelly soils are limited. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	None/None/1B.1	Valley and foothill grassland/annual herb/May-Oct(Nov)/0-755	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Chorizanthe pungens</i> var. <i>hartwegiana</i>	Ben Lomond spineflower	FE/None/1B.1	Lower montane coniferous forest/annual herb/Apr-July/ 295-2,000	<b>Not expected to occur.</b> There are no suitable sandhill soils on site. The site is outside the known geographic range of this species.
<i>Chorizanthe robusta</i> var. <i>hartwegii</i>	Scotts Valley spineflower	FE/None/1B.1	Meadows and seeps, valley and foothill grassland/annual herb/ Apr-July/755-805	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Chorizanthe robusta</i> var. <i>robusta</i>	robust spineflower	FE/None/1B.1	Chaparral, cismontane woodland, coastal dunes, coastal scrub; gravelly (sometimes), sandy (sometimes)/annual herb/ Apr-Sep/10-985	<b>Not expected to occur.</b> Although the chaparral and woodland on site provide potentially suitable habitat for this species, serpentine soils are absent. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Cirsium fontinale</i> var. <i>campylon</i>	Mt. Hamilton thistle	None/None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland; seeps, serpentinite/perennial herb/(Feb)Apr-Oct/330-2,915	<b>Not expected to occur.</b> The site is outside of the species' known geographic range and there are no serpentine soils present.
<i>Collinsia multicolor</i>	San Francisco collinsia	None/None/1B.2	Closed-cone coniferous forest, coastal scrub; serpentinite (sometimes)/annual herb/(Feb)Mar-May/100-900	<b>Not expected to occur.</b> Suitable habitat and soils for this species are absent.
<i>Dirca occidentalis</i>	western leatherwood	None/None/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, North Coast coniferous forest, riparian forest, riparian woodland; mesic/perennial deciduous shrub/Jan-Mar(Apr)/80-1,390	<b>High potential to occur.</b> The forest, chaparral, and woodland habitat on site provide suitable habitat for this species. There are numerous documented occurrences of this species within Santa Clara County, the closest of which is along Stevens Creek Reservoir, approximately 2 miles east of Upper Stevens Creek County Park (CDFW 2022).
<i>Dudleya abramsii</i> ssp. <i>setchellii</i>	Santa Clara Valley dudleya	FE/None/1B.1	Cismontane woodland, valley and foothill grassland; rocky, serpentinite/perennial herb/Apr-Oct/195-1,755	<b>Not expected to occur.</b> Although the woodland and grassland on site provide potentially suitable habitat for this species, there are no serpentine soils present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Eriophyllum latilobum</i>	San Mateo woolly sunflower	FE/SE/1B.1	Cismontane woodland, coastal scrub, lower montane coniferous forest/perennial herb/May-June/150-1,080	<b>Moderate potential to occur.</b> The woodland and forest on site provide suitable habitat for this species. There is one previously documented occurrence along Skyline Boulevard, approximately 4 miles north of Upper Stevens Creek County Park (CDFW 2022).



Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Erysimum teretifolium</i>	Santa Cruz wallflower	FE/SE/1B.1	Chaparral, lower montane coniferous forest/perennial herb/ Mar-July/395-2,000	<b>Not expected to occur.</b> The site is outside of the species' known geographic range.
<i>Fissidens pauperculus</i>	minute pocket moss	None/None/1B.2	North Coast coniferous forest/moss//35-3,355	<b>Moderate potential to occur.</b> The forest on site provides potentially suitable habitat for this species. There is one previously documented occurrence approximately 1 mile west of Upper Steven's Creek County Park (CDFW 2022).
<i>Fritillaria liliacea</i>	fragrant fritillary	None/None/1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland; serpentinite (often)/perennial bulbiferous herb/ Feb-Apr/10-1,345	<b>Not expected to occur.</b> Although the woodland and grassland on site may provide potentially suitable habitat for this species, serpentine soils are not present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Grimmia torenii</i>	Toren's grimmia	None/None/1B.3	Chaparral, cismontane woodland, lower montane coniferous forest; carbonate, openings, rocky, volcanic/moss//1,065-3,805	<b>Not expected to occur.</b> Although the chaparral, woodland, and forest on site provides potentially suitable habitat for this species, there are no serpentine soils present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Grimmia vaginulata</i>	vaginulate grimmia	None/None/1B.1	Chaparral; carbonate, rocky/moss/2,245-2,245	<b>Not expected to occur.</b> Although rocky boulder and rock wall habitat is present within Sanborn County Park, this species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Hesperovax sparsiflora</i> var. <i>brevifolia</i>	short-leaved evax	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal prairie/annual herb/ Mar-June/0-705	<b>Not expected to occur.</b> The site is outside of the species' known elevation range.
<i>Hesperocyparis abramsiana</i> var. <i>abramsiana</i>	Santa Cruz cypress	FT/SE/1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest; granitic (sometimes), sandstone (sometimes)/perennial evergreen tree//920-2,620	<b>Not expected to occur.</b> Although the chaparral and forest on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Hesperocyparis abramsiana</i> var. <i>butanoensis</i>	Butano Ridge cypress	FT/SE/1B.2	Chaparral, closed-cone coniferous forest, lower montane coniferous forest; sandstone/perennial evergreen tree/Oct/1,310-1,605	<b>Not expected to occur.</b> Although the chaparral and forest on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Hoita strobilina</i>	Loma Prieta hoita	None/None/1B.1	Chaparral, cismontane woodland, riparian woodland; mesic, serpentinite (usually)/perennial herb/May-July(Aug-Oct)/ 100-2,820	<b>Moderate potential to occur.</b> The chaparral and woodland on site provide potentially suitable habitat, but serpentine soils are not present. There are numerous documented occurrences of this species within Santa Clara County, the closest of which is approximately 2 miles east of Sanborn County Park (CDFW 2022).
<i>Legenere limosa</i>	legenere	None/None/1B.1	Vernal pools/annual herb/Apr-June/5-2,885	<b>Not expected to occur.</b> No suitable vernal pool habitat present.
<i>Lessingia micradenia</i> var. <i>glabrata</i>	smooth lessingia	None/None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland; roadsides (often), serpentinite/annual herb/(Apr-June)July-Nov/ 395-1,375	<b>Not expected to occur.</b> Although the chaparral, woodland, and grassland on site provide potentially suitable habitat for this species, there are no serpentine soils present. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Malacothamnus arcuatus</i>	arcuate bush-mallow	None/None/1B.2	Chaparral, cismontane woodland/perennial deciduous shrub/ Apr-Sep/50-1,160	<b>High potential to occur.</b> The chaparral and woodland on site provide suitable habitat for this species. There are numerous documented occurrences of this species within Santa Clara County, the closest of which is within 1 mile of Upper Stevens Creek County Park (CDFW 2022).
<i>Monolopia gracilens</i>	woodland woollythreads	None/None/1B.2	Broadleafed upland forest, chaparral, cismontane woodland, North Coast coniferous forest, valley and foothill grassland; serpentinite/ annual herb/ (Feb)Mar-July/330-3,935	<b>High potential to occur.</b> The forest, chaparral, woodland, and grassland on site provide suitable habitat for this species, although serpentine soils are not present. A historic (1904) documented occurrence of this species overlaps with the southeastern corner of Sanborn County Park (CDFW 2022).
<i>Orthotrichum kellmanii</i>	Kellman's bristle moss	None/None/1B.2	Chaparral, cismontane woodland; carbonate, sandstone/moss/ Jan-Feb/1,125-2,245	<b>Not expected to occur.</b> Although chaparral and woodland on site may provide potentially suitable habitat for this species, suitable soils are limited. This species has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Pedicularis dudleyi</i>	Dudley's lousewort	None/SR/1B.2	Chaparral, cismontane woodland, North Coast coniferous forest, valley and foothill grassland/perennial herb/Apr-June/195-2,950	<b>Moderate potential to occur.</b> The woodland and forest on site provides potentially suitable habitat for this species. There is one previously documented occurrence along Bear Creek, approximately 3 miles west of Upper Steven's Creek County Park (CDFW 2022).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Penstemon rattanii</i> var. <i>kleei</i>	Santa Cruz Mountains beardtongue	None/None/1B.2	Chaparral, lower montane coniferous forest, North Coast coniferous forest/perennial herb/May–June/1,310–3,605	<b>Not expected to occur.</b> Although the chaparral and forest on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Pentachaeta bellidiflora</i>	white-rayed pentachaeta	FE/SE/1B.1	Cismontane woodland, valley and foothill grassland/annual herb/Mar–May/115–2,030	<b>Not expected to occur.</b> Although the woodland and grassland on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Piperia candida</i>	white-flowered rein orchid	None/None/1B.2	Broadleafed upland forest, lower montane coniferous forest, North Coast coniferous forest; serpentinite (sometimes)/perennial herb/(Mar)May–Sep/100–4,295	<b>Moderate potential to occur.</b> The forest on site provides suitable habitat for this species, but serpentine soils are not present. There is one previously documented occurrence approximately 2.5 miles north of Upper Stevens Creek County Park (CDFW 2022).
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	Choris’ popcornflower	None/None/1B.2	Chaparral, coastal prairie, coastal scrub; mesic/annual herb/Mar–June/10–525	<b>Not expected to occur.</b> The site is outside of the species’ known elevation range.
<i>Plagiobothrys glaber</i>	hairless popcornflower	None/None/1A	Marshes and swamps, meadows and seeps/annual herb/Mar–May/50–590	<b>Not expected to occur.</b> The site is outside of the species’ known elevation range.
<i>Polygonum hickmanii</i>	Scotts Valley polygonum	FE/SE/1B.1	Valley and foothill grassland/annual herb/May–Aug/690–820	<b>Not expected to occur.</b> The site is outside of the species’ known elevation range.
<i>Sagittaria sanfordii</i>	Sanford’s arrowhead	None/None/1B.2	Marshes and swamps/perennial rhizomatous herb (emergent)/May–Oct(Nov)/0–2,130	<b>Moderate potential to occur.</b> There is suitable freshwater pond and emergent wetland habitat on site. There is one previously documented occurrence along Aldercroft Creek, approximately 2.5 miles east of Sanborn County Park (CDFW 2022).
<i>Sanicula saxatilis</i>	rock sanicle	None/SR/1B.2	Broadleafed upland forest, chaparral, valley and foothill grassland; rocky, scree, talus/perennial herb/Apr–May/2,030–3,850	<b>Not expected to occur.</b> Although the forest, chaparral, and grassland on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Senecio aphanactis</i>	chaparral ragwort	None/None/2B.2	Chaparral, cismontane woodland, coastal scrub; alkaline (sometimes)/annual herb/Jan–Apr(May)/50–2,620	<b>Low potential to occur.</b> There is suitable chaparral and woodland habitat on site. There is one previously documented occurrence in Foothills Park, approximately 3.5 miles north of Upper Stevens Creek County Park (CDFW 2022).
<i>Stebbinsoseris decipiens</i>	Santa Cruz microseris	None/None/1B.2	Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland; openings, serpentinite (sometimes)/annual herb/Apr–May/35–1,640	<b>Not expected to occur.</b> Although the forest, chaparral, and grassland on site may provide potentially suitable habitat for this species, it has not been previously documented within 5 miles of the Project site (CDFW 2022).
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewelflower	None/None/1B.2	Chaparral, cismontane woodland, valley and foothill grassland; serpentinite/annual herb/(Mar)Apr–Sep(Oct)/310–3,280	<b>Low potential to occur.</b> Although the chaparral, woodland, and grassland on site may provide potentially suitable habitat for this species, serpentine soils are not present. There is one previously documented occurrence northeast of Lexington Reservoir, approximately 2 miles east of Sanborn County Park (CDFW 2022).
<i>Trifolium buckwestiorum</i>	Santa Cruz clover	None/None/1B.1	Broadleafed upland forest, cismontane woodland, coastal prairie; gravelly/annual herb/Apr–Oct/345–2,000	<b>Moderate potential to occur.</b> There is suitable forest and woodland habitat on site. There is one previously documented occurrence along Aldercroft Creek, approximately 3.5 miles west of Sanborn County Park (CDFW 2022).
<i>Trifolium polyodon</i>	Pacific Grove clover	None/SR/1B.1	Closed-cone coniferous forest, coastal prairie, meadows and seeps, valley and foothill grassland; granitic (sometimes), mesic/annual herb/Apr–June(July)/15–1,390	<b>Not expected to occur.</b> Suitable habitat for this species on site is limited, and it has not been previously documented within 5 miles of the Project site (CDFW 2022).

**Status Legend**

**Federal**

FE: Federally listed as endangered

FT: Federally listed as threatened

**State**

SE: State listed as endangered

SR: State listed as rare

CRPR: California Rare Plant Rank

1A: Plants presumed extirpated in California and either rare or extinct elsewhere

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Rank

0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

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

0.3 – Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

## Reference

CDFW (California Department of Fish and Wildlife). 2022. California Natural Diversity Database (CNDDDB). RareFind 5, Version 5.2.14. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed June 2022. <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx>.

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# **Attachment C**

## Special-Status Wildlife Species Potential to Occur

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<b>Amphibians</b>				
<i>Ambystoma californiense</i> pop. 1	California tiger salamander - central California DPS	FT/ST, WL	Annual grassland, valley-foothill hardwood, and valley-foothill riparian habitats; vernal pools, other ephemeral pools, and (uncommonly) along stream courses and human-made pools if predatory fishes are absent.	<b>Not expected to occur.</b> The Sanborn and Upper Stevens Creek Project (Project) site does not contain suitable vernal pool or ephemeral pool breeding habitat for this species. The nearest documented occurrence is approximately 3.3 miles northeast of the proposed Charcoal Road-Table Mountain Shaded Fuel Break Area (Area 03B), a historic 1893 record from within Permanente Creek (Occ. No. 337) (CDFW 2022).
<i>Aneides flavipunctatus niger</i>	Santa Cruz black salamander	None/SSC	Restricted to mesic forests in the fog belt of the outer Coast Range of San Mateo, Santa Cruz, and Santa Clara Counties. Mixed deciduous and coniferous woodlands and coastal grasslands. Occurs in moist streamside microhabitats and is found under rocks, talus, and damp woody debris.	<b>High potential to occur.</b> The Project site contains suitable mixed deciduous and coniferous woodlands with moist streamside habitats for this species. The species has been documented on numerous occasions in proximity to both Project site, along Highway 9, within Saratoga Creek, and adjacent to Stevens Canyon Road (CDFW 2022).
<i>Dicamptodon ensatus</i>	California giant salamander	None/SSC	Known from wet coastal forests and chaparral 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.	<b>High potential to occur.</b> The Project site contains suitable wet coastal forests with numerous streams and seeps for breeding and refugia. There are several documented occurrences of this species within the Lyndon Canyon area of Sanborn County Park (CDFW 2022).
<i>Rana boylei</i> pop. 4	foothill yellow-legged frog - central coast DPS	FPT/SE	Rocky streams and rivers with open banks in forest, chaparral, and woodland.	<b>Low potential to occur.</b> Rocky streams habitat is present for this species within forest and woodland habitats of the Project site, but open banks with minimal shade and cobble substrate is limited for this species. This species has been historically (prior to 1960) documented in the vicinity of Saratoga and Stevens Creeks (Occ. Nos. 2081 and 2081), but it is now believed that the species is extirpated from these areas (CDFW 2022).
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	<b>Moderate potential to occur.</b> Lowland streams within riparian woodlands is present throughout the Project site, but the grade is steep, and deep pooling was not observed within the streams. Additionally, the streams are heavily shaded, preventing suitable locations for egg growth and basking for this species. One freshwater pond southeast of Defensible Space Fuel Break 04D in Sanborn County Park may provide suitable breeding habitat for this species, but this location is surrounded by paved pedestrian trails and has high pedestrian activity. This species may use the drainages and associated upland areas within the Project site for foraging and dispersal. This species has been documented approximately 1.4 miles northeast of Sanborn County Park within Saratoga Creek, a historical occurrence from 1997 (Occ. No. 211) (CDFW 2022). This species has also historically been known to breed in Calabasas Creek, approximately 1.2 miles north of the Sanborn County Park Project site; individuals were documented breeding in 2007 (Occ. No. 961) (CDFW 2022).
<i>Taricha rivularis</i>	red-bellied newt	None/SSC	Redwood forests (and sometimes other forest types) along coastal drainages from Humboldt County south to Sonoma County, inland to Lake County. Lives in terrestrial habitats; juveniles generally underground, adults active at surface in moist environments. Will migrate over 1 kilometer to breed, typically in streams with moderate flow and clean rocky substrate.	<b>High potential to occur.</b> Streams and drainages throughout the redwood forests of the Project site provide suitable habitat for this species. This species has been documented on numerous occasions within Upper Stevens Creek County Park, along Grizzly Flat Trailhead and Upper Stevens Creek between 2010 and 2016 (Occ. No. 135) (CDFW 2022).
<b>Birds</b>				
<i>Aquila chrysaetos</i> (nesting and wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats.	<b>Low potential to nest and forage.</b> Suitable nesting habitat for this species is present in steep riparian areas within the Project site, but the lack of open grassland and pastures within the Project site likely precludes this species from occurring. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022). This species has been documented on numerous occasions by citizen scientists flying over Lake Ranch Reservoir within Sanborn County Park, with the most recent observation from March 2022 (eBird 2022).



Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Asio otus</i> (nesting)	long-eared owl	BCC/SSC	Nests in riparian habitat, live oak thickets, other dense stands of trees, edges of coniferous forest; forages in nearby open habitats.	<b>Moderate potential to nest, low potential to forage.</b> High-quality, suitable riparian nesting habitat with live oak thickets is present for this species throughout the Project site, but open foraging habitat is absent. There is a historical occurrence approximately 1.7 miles northwest of the Upper Stevens Creek Project site, a nesting record from 1986 (Occ. No. 37) (CDFW 2022).
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows.	<b>Not expected to nest or forage.</b> The Project site lacks open grassland and scrub habitat with ground squirrel burrows as required for this species. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<i>Brachyramphus marmoratus</i> (nesting)	marbled murrelet	FT/SE	Nests in old-growth coastal forests; forages in subtidal and pelagic habitats.	<b>Moderate potential to nest, not expected to forage.</b> Forest habitat throughout the Project site may contain suitable nesting habitat for this species, but old-growth forest is absent. Critical habitat for this species is located just outside of the Sanborn County Park Project site, west of Skyline Boulevard within Castle Rock State Park. The nearest document occurrence of this species is approximately 2.5 miles west of the Upper Stevens Creek County Park Project site, an occupied nest site within Portola Redwoods State Park from 2007 (Occ. No. 30) (CDFW 2022).
<i>Elanus leucurus</i> (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands.	<b>Moderate potential to nest, not expected to forage.</b> High-quality and suitable woodland and riparian nesting habitat is present throughout the Project site, but open grassland and meadows for foraging are absent. The nearest documented nesting occurrence is approximately 4.7 miles northeast of Upper Stevens Creek County Park Project site from 2007, a pair observed nesting within Stevens Creek (Occ. No. 85) (CDFW 2022). A few individuals of this species were documented by citizen scientists within the vicinity of Sanborn County Park in 2019 (eBird 2022).
<i>Empidonax traillii extimus</i> (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	<b>Not expected to nest or forage.</b> Riparian canopy along streams is present throughout the Project site, but the habitat is fairly open and fragmented, and the species prefers more dense vegetation with riparian thickets. Additionally, the species is more commonly associated with the Cascade and Sierra Mountain ranges (Zeiner et. al. 1988). There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<i>Falco peregrinus anatum</i> (nesting)	American peregrine falcon	FPD/FP, SCD	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present.	<b>Known to occur.</b> This species has been known to nest within Summit Rock of Sanborn County Park since 2008 (Santa Clara Valley Audubon Society 2012). There are documented occurrences (however, specific locations are suppressed) of this species within the Mindego Hill and Castle Rock Ridge U.S. Geological Survey 7.5-minute quadrangles, in which the Project site occurs (CDFW 2022). Suitable nesting and foraging habitat for this species is present within the Project site.
<i>Progne subis</i> (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats, including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways.	<b>Low potential to nest and forage.</b> Although the Project site contains suitable riparian and woodland habitat for this species, the site is out of the typical range for this species (Sacramento region), and occurrences in the Bay Area/Peninsula are not common. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<i>Rallus obsoletus obsoletus</i>	Ridgway's rail	FE/FP, SE	Coastal salt or brackish marshes.	<b>Not expected to nest or forage.</b> Coastal salt or brackish marshes are absent from the Project site.
<i>Sternula antillarum browni</i> (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats.	<b>Not expected to nest or forage.</b> Shallow estuary and sandy beach habitat is absent from the Project site.
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season.	<b>Low potential to nest and forage.</b> Although the Project site contains some suitable riparian vegetation for this species, the vegetation is largely woodland with little to no areas with dense riparian thickets, as required by this species. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<b>Fishes</b>				
<i>Eucyclogobius newberryi</i>	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River.	<b>Not expected to occur.</b> The Project site lacks brackish water habitat as required for this species.
<i>Hypomesus transpacificus</i>	Delta smelt	FT/SE	Sacramento-San Joaquin Delta; seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay.	<b>Not expected to occur.</b> The Project site lacks suitable aquatic habitat for this species.
<i>Oncorhynchus kisutch</i> pop. 4	coho salmon – central California coast ESU	FE/SE	Streams and small freshwater tributaries during first half of life cycle, and estuarine and marine waters of the Pacific Ocean during the second half of life cycle. Spawns in small streams with stable gravel substrates.	<b>Not expected to occur.</b> The Project site lacks suitable aquatic habitat for this species.
<i>Oncorhynchus mykiss irideus</i> pop. 8	steelhead – central California coast DPS	FT/None	Coastal basins from Redwood Creek south to the Gualala River, inclusive; does not include summer-run steelhead.	<b>Not expected to occur.</b> The Project sites lack suitable aquatic habitat for this species.
<b>Invertebrates</b>				
<i>Danaus plexippus</i> pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources.	<b>Not expected to occur.</b> The Project site lacks protected groves with nectar and floral sources and nearby water. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<i>Trimerotropis infantilis</i>	Zayante band-winged grasshopper	FE/None	Isolated sandstone deposits in the Santa Cruz Mountains (the Zayante Sand Hills ecosystem).	<b>Not expected to occur.</b> The Project site lacks sandstone deposit habitat, and the site is outside of the typical range for this species (Zayante Sand Hills Ecosystem).
<i>Bombus crotchii</i>	Crotch bumble bee	None/SCE	Open grassland and scrub habitats with abundant floral resources. Feeds on the nectar of open flowers with short corollas. Nests underground and overwinters in soft, disturbed soil.	<b>Low potential to occur.</b> Although the Project site contains very small fragments of suitable habitat for this species, this habitat is isolated from other suitable habitat areas in the region. The floral resources required for this species were not observed during the reconnaissance-level surveys, and there are no documented occurrences of the species in the vicinity, making the potential for this species to occur low.
<i>Bombus occidentalis occidentalis</i>	western bumble bee	None/SCE	Meadows and grasslands with abundant floral resources. Feeds on the nectar of open flowers with short corollas. Nests in underground cavities, small rodent burrows, and aboveground in logs. Overwinters in soil and leaf litter.	<b>Low potential to occur.</b> Although the Project site contains very small fragments of suitable habitat for this species, this habitat is isolated from other suitable habitat areas in the region. The floral resources required for this species were not observed during the reconnaissance-level surveys, and there are no documented occurrences of the species in the vicinity, making the potential for this species to occur low.
<b>Mammals</b>				
<i>Antrozous pallidus</i>	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in human-made structures and trees.	<b>Moderate potential to occur.</b> Woodland and forest roosting and foraging habitat is available within the Project site, but open grasslands and shrublands are absent. There are several human-made structures and rocky outcrops within the Project site. There are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<i>Bassariscus astutus</i>	ringtail	None/FP	Mixed forests and shrublands near rocky areas or riparian habitats; forages near water and is seldom found more than 1 kilometer (0.62 miles) from a water source.	<b>Moderate potential to occur.</b> Suitable woodland and mixed forest habitat is present within the Project site, but there are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels.	<b>Moderate potential to occur.</b> Deciduous forest and riparian habitat is available throughout the Project site, but limestones caves and lava tubes for roosting are absent. This species may roost within the human-made structures within the Project site. This species has been documented 2.3 miles southeast of the Sanborn County Park Project site; a 2002 occurrence within the Chapel at Alma College (Occ. No. 600) (CDFW 2022). This species has also been documented 2.45 miles east of the Upper Stevens Creek County Park Project site; an occurrence from 2000 within a barn (Occ. No. 601) (CDFW 2022).
<i>Neotoma fuscipes annectens</i>	San Francisco dusky footed woodrat	None/SSC	Forest habitats with a moderate canopy and moderate to dense understory.	<b>Known to occur.</b> The Project site contains high-quality suitable forest habitat for this species. Woodrat houses were observed throughout the Project site during the 2022 site surveys.
<i>Puma concolor</i>	puma	None/SCT	Scrubs, chaparral, riparian, woodland, and forest; rests in rocky areas and on cliffs and ledges that provide cover; most abundant	<b>High potential to occur.</b> The Project site contains high-quality suitable forest habitat for this species, and the species has been documented as occurring within proximity of the Project site by the general public.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
			in riparian areas and brushy stages of most habitats throughout California, except deserts.	
<i>Taxidea taxus</i>	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils.	<b>Not expected to occur.</b> Open grassland, scrub, agricultural and pasture habitat, as required to support this species, is absent from the Project site. Additionally, there are no documented occurrences of this species within 5 miles of the Project site (CDFW 2022).
<b>Reptiles</b>				
<i>Emys marmorata</i>	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.	<b>High potential to occur.</b> The freshwater pond southeast of Defensible Space Fuel Break 04D in Sanborn County Park may provide suitable habitat for this species. Additionally, Lake Ranch within Sanborn County Park provides suitable habitat for this species, with abundant surrounding upland habitat for nesting. This species has historically been documented as occurring within Lake Ranch (CDFW 2022).
<i>Thamnophis sirtalis tetrataenia</i>	San Francisco garter snake	FE/FP, SE	Wide range of habitats, including grasslands or wetlands adjacent to ponds, marshes, and sloughs.	<b>Moderate potential to occur.</b> The freshwater pond southeast of Defensible Space Fuel Break 04D in Sanborn County Park may provide suitable habitat for this species, but vegetation is not present in continuous patches, the feature is surrounded by paved pedestrian trails, and the location lacks connectivity to other known populations of this species. There are documented occurrences (however, specific locations are suppressed) of this species within the Mindego Hill U.S. Geological Survey 7.5-minute quadrangles in which the Upper Stevens Creek County Park Project site occurs (CDFW 2022).

**Status Legend**

**Federal**

- BCC: USFWS—Birds of Conservation Concern
- FC: Candidate for federal listing as threatened or endangered
- FE: Federally listed as endangered
- FPD: Federally proposed for delisting
- FPT: Federally proposed for listing as threatened
- FT: Federally listed as threatened

**State**

- FP: CDFW Fully Protected species
- SCE: State candidate for listing as endangered
- SCD: State candidate for delisting
- SCT: State candidate for listing as threatened
- SE: State listed as endangered
- SSC: California Species of Special Concern
- ST: State listed as threatened
- WL: CDFW Watch List species

## References

- CDFW (California Department of Fish and Wildlife). 2022. California Natural Diversity Database (CNDDDB). RareFind 5, Version 5.2.14. Sacramento, California: CDFW, Biogeographic Data Branch. Accessed June 2022. <https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx>.
- eBird. 2022. eBird: An online database of bird distribution and abundance [web application]. Ithaca, New York: Cornell Lab of Ornithology. Accessed June 2022. <http://www.ebird.org>.
- Santa Clara Valley Audubon Society. 2012. "American Peregrine Falcon." [https://kipdf.com/the-peregrine-falcons-of-summit-rock\\_5ac1d1a21723dd47802cc83b.html](https://kipdf.com/the-peregrine-falcons-of-summit-rock_5ac1d1a21723dd47802cc83b.html).
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. Of Fish and Game, Sacramento, California.

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# **Attachment D**

## Representative Site Photographs





**Photo 1.** Sanborn eastern entrance south of proposed evacuation route off Sanborn Road.



**Photo 2.** Southern portion of Upper Stevens Creek Park along Skyline Boulevard.



**Photo 3.** Representative Douglas fir (*Pseudotsuga menziesii*) and tan oak (*Notholithocarpus densiflorus*) forest in Sanborn Park.



**Photo 4:** Forest with Pacific madrone and understory shrubs in Upper Stevens Creek Park.





**Photo 5.** Representative dry ephemeral drainage (approximately 15 feet wide) in Sanborn Park.



**Photo 6.** Representative ephemeral drainage in Sanborn Park with ordinary high water mark indicators.



**Photo 9.** Grassland and scrub near transmission utility lines in Sanborn Park.



**Photo 10.** Dusky-footed wood rat (*Neotoma fuscipes*) stick house (aka. midden) in Upper Stevens Creek Park.

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# **Attachment E**

## Plant Species Compendium



# Vascular Species

## Eudicots

### ADOXACEAE – MUSKROOT FAMILY

*Sambucus nigra* ssp. *caerulea* – blue elderberry

### ANACARDIACEAE – SUMAC OR CASHEW FAMILY

*Toxicodendron diversilobum* – poison oak

### APIACEAE – CARROT FAMILY

\* *Anthriscus caucalis* – bur chervil

### APOCYNACEAE – DOGBANE FAMILY

\* *Vinca major* – bigleaf periwinkle

### ARALIACEAE – GINSENG FAMILY

\* *Hedera helix* – English ivy

### ASTERACEAE – SUNFLOWER FAMILY

*Achillea millefolium* – common yarrow

*Adenocaulon bicolor* – American trailplant

*Agoseris grandiflora* – bigflower agoseris

*Artemisia douglasiana* – Douglas' sagewort

*Baccharis pilularis* – coyote brush

\* *Carduus pycnocephalus* – Italian plumeless thistle

\* *Cichorium intybus* – chicory

*Cirsium occidentale* – cobwebby thistle

*Euthamia occidentalis* – western goldentop

*Grindelia hirsutula* – hairy gumweed

\* *Hypochaeris glabra* – smooth cat's ear

*Madia elegans* – common madia

*Madia sativa* – coast tarweed

*Symphotrichum chilense* – Pacific aster

*Xanthium strumarium* – cocklebur

### BETULACEAE – BIRCH FAMILY

*Alnus rhombifolia* – white alder

*Corylus cornuta* – beaked hazelnut

## BORAGINACEAE – BORAGE FAMILY

*Eriodictyon californicum* – California yerba santa

## BRASSICACEAE – MUSTARD FAMILY

- \* *Brassica nigra* – black mustard
- \* *Rosmarinus officinalis* – rosemary

## CAPRIFOLIACEAE – HONEYSUCKLE FAMILY

*Lonicera hispidula* – pink honeysuckle

## ERICACEAE – HEATH FAMILY

*Arbutus menziesii* – madrone  
*Arctostaphylos glauca* – bigberry manzanita  
*Arctostaphylos sensitiva* – glossyleaf manzanita

## FABACEAE – LEGUME FAMILY

- Acmispon glaber* – deer weed
- \* *Lathyrus latifolius* – perennial pea
  - Lupinus bicolor* – miniature lupine
  - Pickeringia montana* – chaparral pea
  - \* *Spartium junceum* – Spanish broom
  - \* *Vicia villosa* – winter vetch

## FAGACEAE – OAK FAMILY

*Notholithocarpus densiflorus* – tanoak  
*Quercus agrifolia* – coast live oak  
*Quercus chrysolepis* – canyon live oak  
*Quercus dumosa* – Nuttall's scrub oak  
*Quercus kelloggii* – California black oak  
*Quercus wislizeni* – interior live oak

## GERANIACEAE – GERANIUM FAMILY

*Geranium carolinianum* – Carolina geranium

## GROSSULARIACEAE – GOOSEBERRY FAMILY

*Ribes sanguineum* – redflower currant

## HYPERICACEAE – ST. JOHN'S WORT FAMILY

- \* *Hypericum calycinum* – Aaron's beard

## LAMIACEAE – MINT FAMILY

*Clinopodium douglasii* – yerba buena  
*Stachys bullata* – California hedgenettle

**LAURACEAE – LAUREL FAMILY**

*Umbellularia californica* – California bay

**MONTIACEAE – MONTIA FAMILY**

*Claytonia parviflora* – streambank springbeauty

**ONAGRACEAE – EVENING PRIMROSE FAMILY**

*Clarkia purpurea* – winecup clarkia

*Clarkia unguiculata* – elegant clarkia

**PAPAVERACEAE – POPPY FAMILY**

*Dendromecon rigida* – bush poppy

*Eschscholzia californica* – California poppy

**PHRYMACEAE – LOPSEED FAMILY**

*Diplacus aurantiacus* – bush monkeyflower

**PLANTAGINACEAE – PLANTAIN FAMILY**

*Collinsia heterophylla* – purple Chinese houses

**RANUNCULACEAE – BUTTERCUP FAMILY**

*Delphinium nudicaule* – red larkspur

*Ranunculus californicus* – California buttercup

**RHAMNACEAE – BUCKTHORN FAMILY**

*Ceanothus cuneatus* – wedge leaf ceanothus, buck brush

*Ceanothus thyrsiflorus* – blue blossom

**ROSACEAE – ROSE FAMILY**

*Adenostoma fasciculatum* – chamise

*Cercocarpus betuloides* – birch leaf mountain mahogany

*Heteromeles arbutifolia* – toyon

*Holodiscus discolor* – ocean spray brush

*Rosa gymnocarpa* – dwarf rose

\* *Rubus armeniacus* – Himalayan blackberry

*Rubus parviflorus* – thimbleberry

*Rubus ursinus* – California blackberry

**RUBIACEAE – MADDER FAMILY**

*Galium porrigens* – graceful bedstraw

**SALICACEAE – WILLOW FAMILY**

*Salix lasiolepis* – arroyo willow

### SAPINDACEAE – SOAPBERRY FAMILY

*Acer macrophyllum* – bigleaf maple

*Aesculus californica* – California buckeye

### SIMAROUBACEAE – QUASSIA OR SIMAROUBA FAMILY

\* *Ailanthus altissima* – tree of heaven

### URTICACEAE – NETTLE FAMILY

*Urtica dioica* – stinging nettle

### VALERIANACEAE – VALERIAN FAMILY

\* *Centranthus ruber* – red valerian

### VIOLACEAE – VIOLET FAMILY

*Viola sempervirens* – evergreen violet

## Ferns and Fern Allies

### AZOLLACEAE – MOSQUITO FERN FAMILY

*Azolla filiculoides* – Pacific mosquitofern

### DRYOPTERIDACEAE – WOOD FERN FAMILY

*Dryopteris arguta* – coastal woodfern

*Polystichum munitum* – western swordfern

### EQUISETACEAE – HORSETAIL FAMILY

*Equisetum telmateia* – giant horsetail

### PTERIDACEAE – BRAKE FAMILY

*Adiantum aleuticum* – Aleutian maidenhair

*Adiantum jordanii* – California maidenhair

*Pentagramma triangularis* – goldback fern

## Gymnosperms and Gnetophytes

### CUPRESSACEAE – CYPRESS FAMILY

*Calocedrus decurrens* – incense cedar

*Sequoia sempervirens* – redwood

*Sequoiadendron giganteum* – giant sequoia

### PINACEAE – PINE FAMILY

*Pinus attenuata* – knobcone pine

*Pinus sabiniana* – foothill pine

*Pseudotsuga menziesii* – Douglas fir

## Monocots

### CYPERACEAE – SEDGE FAMILY

- Cyperus eragrostis* – tall flatsedge
- Schoenoplectus acutus* – hardstem bulrush

### IRIDACEAE – IRIS FAMILY

- Iris fernaldii* – Fernald's iris
- Sisyrinchium bellum* – western blue-eyed grass

### JUNCACEAE – RUSH FAMILY

- Juncus effusus* – soft rush

### LILIACEAE – LILY FAMILY

- Calochortus albus* – white fairy-lantern

### POACEAE – GRASS FAMILY

- \* *Avena fatua* – wild oat
- \* *Briza maxima* – big quakinggrass
- \* *Bromus diandrus* – ripgut brome
- \* *Bromus hordeaceus* – soft brome
- Bromus sitchensis* var. *carinatus* – California brome
- \* *Cynosurus echinatus* – annual dogtails
- Deschampsia elongata* – slender hairgrass
- Elymus glaucus* – blue wildrye
- \* *Festuca perennis* – perennial rye grass
- Hordeum brachyantherum* – meadow barley
- \* *Hordeum marinum* – seaside barley
- Melica imperfecta* – smallflower melicgrass
- Melica torreyana* – Torrey's melicgrass
- \* *Phalaris aquatica* – Harding grass
- \* *Stipa miliacea* – no common name
- Stipa pulchra* – purple needlegrass

### RUSCACEAE – LILY-OF-THE-VALLEY FAMILY

- Maianthemum racemosum* – feathery false lily of the valley

### THEMIDACEAE – BRODIAEA FAMILY

- Brodiaea elegans* – harvest brodiaea
- Triteleia laxa* – Ithuriel's spear



## TYPHACEAE – CATTAIL FAMILY

*Typha latifolia* – broadleaf cattail

- \* signifies introduced (non-native) species

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# **Attachment F**

## Wildlife Species Compendium

# Amphibians

## Frogs

### RANIDAE – TRUE FROGS

- \* *Lithobates catesbeianus* – American bullfrog

## Salamanders

### SALAMANDRIDAE – NEWTS

- Taricha torosa* – California newt

# Birds

## Blackbirds, Orioles and Allies

### ICTERIDAE – BLACKBIRDS

- Agelaius phoeniceus* – red-winged blackbird

## Bushtits

### AEGITHALIDAE – LONG-TAILED TITS AND BUSHTITS

- Psaltriparus minimus* – bushtit

## Creepers

### CERTHIIDAE – CREEPERS

- Certhia americana* – brown creeper

## Finches

### FRINGILLIDAE – FRINGILLINE AND CARDUELINE FINCHES AND ALLIES

- Haemorhous mexicanus* – house finch

## Flycatchers

### TYRANNIDAE – TYRANT FLYCATCHERS

- Empidonax difficilis* – Pacific-slope flycatcher
- Myiarchus cinerascens* – ash-throated flycatcher
- Sayornis nigricans* – black phoebe

## Hawks

### ACCIPITRIDAE – HAWKS, KITES, EAGLES, AND ALLIES

*Buteo jamaicensis* – red-tailed hawk

*Buteo lineatus* – red-shouldered hawk

## Jays, Magpies and Crows

### CORVIDAE – CROWS AND JAYS

*Aphelocoma californica* – California scrub-jay

*Corvus brachyrhynchos* – American crow

*Corvus corax* – common raven

*Cyanocitta stelleri* – Steller's jay

## New World Quail

### ODONTOPHORIDAE – NEW WORLD QUAIL

*Callipepla californica* – California quail

## Nuthatches

### SITTIDAE – NUTHATCHES

*Sitta carolinensis* – white-breasted nuthatch

## Old World Warblers and Gnatcatchers

### POLIOPTILIDAE – GNATCATCHERS

*Polioptila caerulea* – blue-gray gnatcatcher

## Pigeons and Doves

### COLUMBIDAE – PIGEONS AND DOVES

*Patagioenas fasciata* – band-tailed pigeon

*Zenaida macroura* – mourning dove

## Rails, Gallinules and Coots

### RALLIDAE – RAILS, GALLINULES, AND COOTS

*Fulica americana* – American coot

## Terns and Gulls

### LARIDAE – GULLS, TERNS, AND SKIMMERS

*Sterna forsteri* – Forster's tern

## Thrushes

### TURDIDAE – THRUSHES

*Catharus guttatus* – hermit thrush

*Turdus migratorius* – American robin

## Titmice

### PARIDAE – CHICKADEES AND TITMICE

*Poecile rufescens* – chestnut-backed chickadee

## Woodpeckers

### PICIDAE – WOODPECKERS AND ALLIES

*Colaptes auratus* – northern flicker

*Melanerpes formicivorus* – acorn woodpecker

*Dryobates nuttallii* – Nuttall's woodpecker

*Dryobates pubescens* – downy woodpecker

## Wrens

### TROGLODYTIDAE – WRENS

(blank)

## New World Sparrows

### PASSERELLIDAE – NEW WORLD SPARROWS

*Junco hyemalis* – dark-eyed junco

*Melospiza crissalis* – California towhee

*Pipilo maculatus* – spotted towhee

## Typical Warblers, Parrotbills, Wrentit

### SYLVIIDAE – SYLVIID WARBLERS

*Chamaea fasciata* – wrentit



# Fishes

## Other Bony Fishes

### POECILIIDAE – POECILIIDS

- \* *Gambusia affinis* – mosquitofish

## Minnnows and Carps

### CYPRINIDAE – MINNOWS AND CARPS

- \* *Cyprinus carpio* – common carp

## Sunfishes And Freshwater Basses

### CENTRARCHIDAE – SUNFISHES

- Micropterus* sp.

# Invertebrates

## Butterflies

### LYCAENIDAE – BLUES, HAIRSTREAKS, AND COPPERS

- Plebejus* sp.

### PAPILIONIDAE – SWALLOWTAILS

- Papilio* sp.

# Mammals

## Domestic

### FELIDAE – CATS

- \* *Felis catus* – domestic cat

## Squirrels

### SCIURIDAE – SQUIRRELS

- Otospermophilus beecheyi* – California ground squirrel

## Ungulates

### CERVIDAE – DEERS

*Odocoileus hemionus* – mule deer

## Reptiles

### Lizards

### PHRYNOSOMATIDAE – IGUANID LIZARDS

*Sceloporus occidentalis* – western fence lizard

\* signifies introduced (non-native) species

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# **Attachment G**

California Department of Fish and Wildlife Comments

Sanborn and Upper Stevens Creek County Parks Forest Health Plan Project  
Santa Clara County Parks and Recreation Department  
Santa Clara County

California Department of Fish and Wildlife – Bay Delta Region  
Comments and Recommendations  
March 24, 2023

The California Department of Fish and Wildlife (CDFW) has received a request for review and comment of the Biological Technical Memorandum that provides biological resources assessments conducted for the **Sanborn and Upper Stevens Creek County Parks Forest Health Plan**, proposed to be implemented under the California Vegetation Treatment Program (CalVTP).

The project proposes to implement vegetation treatments on 4,843 acres of land owned by The Wildlands Conservancy in Sonoma County. Proposed treatment types include shaded fuel breaks and ecological restoration that will be implemented utilizing mechanical and manual vegetation removal, and prescribed burning.

The purpose of the request is to initiate consultation and feedback from CDFW regarding proposed project avoidance and mitigation measures consistent with the CalVTP PEIR and the use of appropriate Standard Project Requirements (SPRs) and Mitigation Measures for listed species and sensitive resources that have the potential to occur within the project area during vegetation treatment activities.

CDFW has reviewed the Biological Technical Memorandum (memo) and is providing additional comments and/or recommendations to the **Sanborn and Upper Stevens Creek County Parks Forest Health Plan** as they pertain to potential impacts to sensitive habitat and special status species:

1. Riparian Area Protection

The proposed treatment areas contain several watercourses, tributaries, and drainages, including Lake Ranch Reservoir located in Sanborn County Park. The project proposes to implement *SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function* (memo page 40) to reduce impacts to riparian habitats. Will the project also consider the implementation of *SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones*? CDFW recommends the project implement *SPR HYD-4* which will provide additional riparian habitat protection within the Watercourse and lake Protection Zones (WLPZ) by limiting equipment and vehicle use, prohibiting burn piles and fire ignitions (with the exception for low intensity backing fires), and minimizing soil erosion in these areas.

2. Biomass Disposal

The project proposes to manage biomass by mastication, chipping, and removal to composting or biomass processing facilities (memo Section 1.3, page 3). Will the project provide any standards or guidelines for biomass processing? CDFW recommends the project provide standards for chip and mulch depth, which is typically no more than 4 to 6 inches in depth, and a maximum percent cover for the treatment areas. The spreading of chips and mulch should be avoided within WLPZ areas (per *SPR HYD-4*) and areas of identified mammal burrows.

### 3. Special Status Bumble Bees

On September 30th, 2022, candidacy was reinstated for the four bumble bee species petitioned for listing—franklin's, crotch, western, and suckley cuckoo—under the California Endangered Species Act (CESA). Candidate species are given protection under CESA until a determination is made on their listing status. More information on the bumble bee listing can be found on the Fish and Game Commission website at <https://fgc.ca.gov/CESA#bb>.

The candidate bumble bee species within the range of the project area are the Crotch bumble bee (*Bombus crotchii*) and, to a lesser degree, the Western bumble bee (*Bombus occidentalis occidentalis*). In the memo under *Project-Specific Requirements* (memo page 50), the project proposes to either survey for the Crotch and western bumble bee or assume presence and implement *Mitigation Measure BIO-2g*. However, these bees are not listed in *Table 5. Special-Status Wildlife with Potential to Occur* (memo page 12) nor is it listed in *Table 6 Sensitive Resource by Treatment Area* or *Attachment C*. Have the project treatment areas been properly assessed for suitable bumble bee habitat?

CDFW recommends that prior to project activities, a qualified biologist conduct reconnaissance surveys within the treatment areas for suitable special status bumble bee habitat (grassland, meadows, shrub) that contain associated floral resources. If suitable special status bumble bee habitat is present, CDFW recommends implementing *Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)* in those specific suitable habitat areas of the project. In addition, CDFW recommends the project provide a no-disturbance buffer to any special status bumble bee nesting sites that are discovered during project activities and treatments should be avoided within the buffer until the bumble bee nesting season is over.

If the project chooses to determine presence of special status bumble bees, a qualified biologist should conduct focused visual surveys for special status bumble bee species in potential habitat within the project area during the appropriate bumble bee flight period. The surveys should be conducted prior to project activities to evaluate impacts resulting from potential ground and vegetation-disturbance associated with the treatment areas. Please note that protocol-level bumble bee surveys often require the species to be caught and photographed for identification. Because these special status bees are CESA candidate species, they are given protection under CESA until a determination is made on their listing status. Therefore, take authorization may be required by CDFW prior to conducting surveys.

Bumble bees depend on the availability of habitats with a rich supply of floral resources that bloom continuously during the entirety of the colony's life. Suitable habitat for the crotch bumble bee can be defined as open grasslands, shrublands, and chaparral. While the western bumble bee can be found in meadows and grasslands with abundant floral resources and in some natural areas within urban environments. Although bumble bees are generalist foragers and do not depend on any one flower type, there are plant families known to be associated with bumble bee observations. Surveys for floral resources should be floristic in nature and timed to coincide with the blooming period of the flowering species.

Information on bumble bee habitat requirements and associated floral resources can be found in the following references:



CDFW's *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*, available online at

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=166804&inline>

A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act, available online at

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=161902&inline>

#### 4. San Francisco Dusky Footed Woodrats

In the discussion of *SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites*, the project proposes to implement nest relocation procedures if woodrat nests within treatment areas cannot be avoided (memo page 47). In addition to the proposed nest dismantling procedures, CDFW recommends the following additional measures to further reduce impacts to woodrats:

- Nest removal efforts should not take place during inclement or extreme weather conditions and should take place at dusk or dawn when woodrats are least susceptible to predators.
- Prior to any nest removal, safety measures should be employed to minimize potential human exposure to possible diseases carried by woodrats. Adequate protection, such as protective clothing, equipment and tools, gloves, and appropriate masks, to ensure safety regarding viruses and diseases potentially carried by rodents, is recommended.

The project includes pile burning as a prescribed burning treatment activity. CDFW recommends that in areas of existing woodrat habitat, piles be burned as soon as feasible to reduce the risk of woodrats having moved into the vegetation debris piles. Where feasible, prior to burning, piles in these areas should be disturbed to ensure any woodrats inside of the piles have the opportunity to escape.

#### 5. California red-legged frog

In the discussion of California red-legged frogs under *Other Recommendations* (memo page 52-53), the project states "*If herbicide use is proposed, only cut stump and basal bark applications may be used if the treatment is not applied within 60 feet of aquatic habitat.*" The measure is in contradiction of the implementation of *SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife* (memo page 45), which states that "*The use of herbicides is not currently proposed*" and "*if, in the future, herbicides are considered for use in treating/removing invasive plants, they would not be applied in any area within 300 feet of potential California red-legged frog/foothill yellow-legged frog habitat*". Please clarify this contradiction. CDFW concurs with the latter limitations of herbicide treatments and that herbicides should not be applied within 300 feet of potential aquatic amphibian habitat.

In the same discussion of California red-legged frogs under *Other Recommendations* (memo page 53), the project states "*No mechanized operations may occur in a Class I or Class II*

*watercourse...*”. Is this language meant to refer to no mechanized operations within a Class I or Class II WLPZ or watercourse channel? Please clarify.

6. San Francisco Garter Snake

In both section 3.1.5 *Treatment Areas 04C and 04D* and *Attachment C*, the project discloses that a freshwater pond immediately adjacent to the defensible space activity in Treatment Area 04D may support San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). However, the memo doesn't provide any protection measures if this species is found present within the treatment area. Will project activities in Treatment Area 04D involve mechanical treatments (such as mastication), heavy equipment or prescribed burns? If so, impacts to San Francisco garter snake may occur.

CDFW recommends the project provide avoidance measures for the San Francisco garter snake in species suitable habitat. Prior to any vegetation removal activity within Treatment Area 04D, a qualified biologist should visually inspect the treatment area for the presence of San Francisco garter snake. San Francisco garter snake is fully protected under *Fish and Game Code Section 5050*. Under this statute, take of a fully protected species may not occur except for scientific or recovery purposes. Catch, pursue, capture, or attempt to catch, pursue and capture is considered take as defined in *Section 86* of the Fish and Game Code. Therefore, any San Francisco garter snake encountered in the project area should not be handled, a no disturbance buffer should be implemented, and the species should be left alone until it leaves the area on its own. CDFW also recommends that all vehicles and equipment staged near suitable garter snake habitat be checked for the species prior to moving.

7. Marbled Murrelet

The project discusses the potential for the marbled murrelet, a federally threatened and state endangered species, to occur within the project area. In the section *Other Recommendations* (memo page 52), other than common nesting bird surveys under *SPR BIO-12* the project states that “*If any marbled murrelets are encountered during treatment, work in the vicinity of the observation would be stopped...*”.

The marbled murrelet is a secretive, solitary species with soft, or no vocalizations around nest sites, passive defense behaviors and physical characteristics that tend to decrease the visibility of a nesting murrelet. It is unlikely that marbled murrelets will be detected and encountered during common nesting bird surveys and therefore require specific protocol-level surveys to determine occupancy within a project area.

To reduce significant impacts to marbled murrelets, CDFW recommends the following specific avoidance and mitigation measures to be implemented in treatment areas with marbled murrelet habitat:

- a. Marbled Murrelet Habitat Assessment. In areas where marbled murrelet nesting habitat may be present, CDFW recommends a qualified biologist conduct a habitat assessment prior to the start of project activities. The habitat assessment shall include a visual inspection of suitable nesting habitat features within 0.25 miles of the project area that occur within conifer forested areas. Suitable habitat characteristics shall follow the definitions of potential habitat and nesting platforms as described in *Methods for Surveying Marbled Murrelets in Forests; A revised Protocol for Land Management and*

*Research (Mack et al. 2003)*, which includes mature and old-growth coniferous forest stands, and younger coniferous forest stands having platforms with a relatively flat surface at least 10 cm in diameter and 10 m high in the live crown of a coniferous tree. Platforms can be created by a wide bare branch, moss or lichen covering a branch, mistletoe, witches' brooms, and other deformities, or structures such as squirrel nests (Mack et al. 2003). Habitat features found during the assessment shall be identified, flagged, mapped, or marked for avoidance and retention as a sensitive area.

- b. Marbled Murrelet Surveys. If any suitable marbled murrelet nesting habitat is identified during the habitat assessment, CDFW recommends a qualified biologist conduct protocol level audio-visual murrelet surveys following the *Pacific Seabird Group Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research* (Mack et al. 2003) available online at <http://www.pacificseabirdgroup.org>, which may entail two years of surveys. Protocol level surveys should be utilized to determine the presence of nesting murrelets within 0.25 miles of the project area and assess whether project activities will have an impact on marbled murrelets.
- c. Marbled Murrelet Audio and Visual Disturbance Buffers. If conducting two-year protocol level surveys is not feasible, if nesting marbled murrelets are detected during surveys, or if the project chooses to assume presence, CDFW recommends a qualified biologist develop appropriate avoidance disturbance buffers around suitable habitat identified within 0.25 miles of the project area to be implemented during project activities that occur during the murrelet breeding season (March 24 to September 15). Appropriate audio and visual disturbance buffers shall follow the U.S. Fish and Wildlife Service's (USFWS) *Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California*, dated October 1, 2020. Although the cover letter indicates that the guidance is valid only to the southern limit of the Russian River watershed, CDFW recommends use of the guidance document throughout the entire murrelet range.

If suitable marbled murrelet habitat is identified and the project proposes to conduct protocol level surveys, consultation with CDFW is recommended to allow the agency to provide technical assistance with habitat determinations and pre-project survey planning and methods.

Marbled murrelet references:

- Evans Mack, D., W. P. Ritchie, S. K. Nelson, E. Kuo-Harrison, P. Harrison, and T. E. Hamer. 2003. Methods for surveying Marbled Murrelets in forests: a revised protocol for land management and research. Pacific Seabird Group Technical Publication Number 2. Available from <http://www.pacificseabirdgroup.org>
- USFWS, 2020. Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. 10 October 2020.

#### 8. Other Special Status Birds

In the memo section *Other Recommendations* (memo page 53), the project doesn't provide any specific no-disturbance buffers for the American peregrine falcon, a Fully Protected Species under *Fish and Game Code 3511*. The project identifies that the American peregrine falcon is known to occur within the project area. How will this species be avoided if found within the

treatment areas? CDFW recommends the project provide a specific no-disturbance buffer if this species is found during SPR BIO-10 surveys.

In *Table 5. Special-Status Wildlife with Potential to Occur* (memo page 12), the least Bell's vireo, a federal and state endangered species, is listed as a species with a potential to occur within the project area, however the project doesn't provide any specific avoidance measures nor is it listed in *Table 6 Sensitive Resource by Treatment Area*. CDFW recommends the project identify which treatment areas the least Bell's vireo has the potential to occur in, discuss how the species will be avoided during project activities, and provide a specific no-disturbance buffer if this species is found during SPR BIO-10 surveys.

Should project activities or project locations change, additional consultation with CDFW may be necessary. CDFW appreciates the opportunity to review the **Sanborn and Upper Stevens Creek County Parks Forest Health Plan**. Please contact Robynn Swan, Senior Environmental Scientist (Specialist) at [Robynn.Swan@wildlife.ca.gov](mailto:Robynn.Swan@wildlife.ca.gov) or (707) 210-4467, with any questions, comments, or clarification on provided recommendations.

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# **Attachment E**

## Soils Report







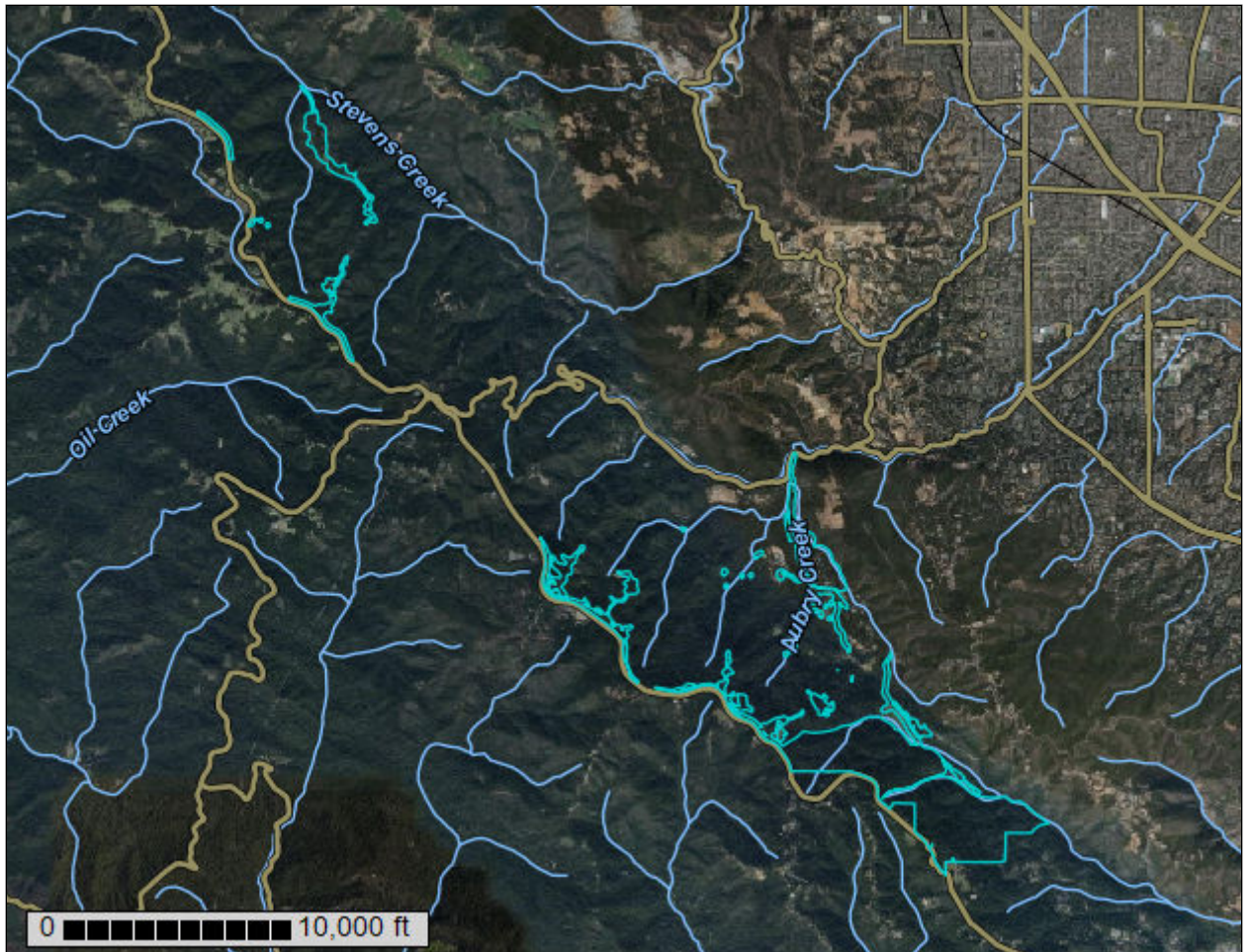
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for San Mateo Area, California; Santa Clara Area, California, Western Part; and Santa Cruz County, California



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

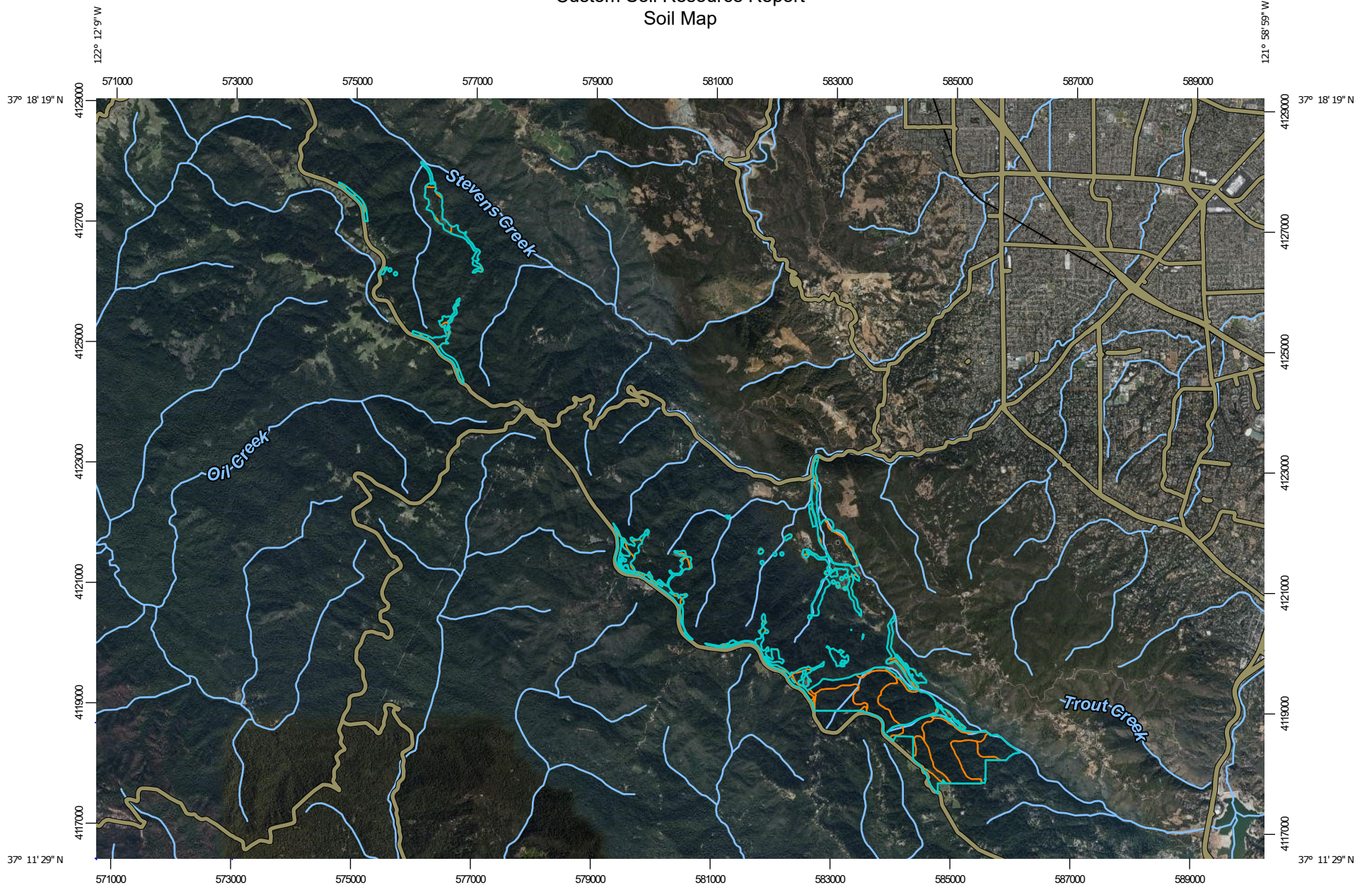
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

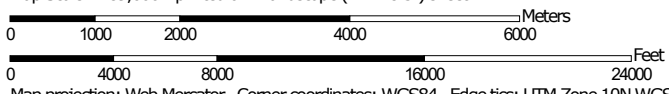
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map




Map Scale: 1:89,000 if printed on A landscape (11" x 8.5") sheet.





### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,000 to 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Mateo Area, California  
 Survey Area Data: Version 15, Sep 9, 2021

Soil Survey Area: Santa Clara Area, California, Western Part  
 Survey Area Data: Version 10, Sep 9, 2021

Soil Survey Area: Santa Cruz County, California  
 Survey Area Data: Version 15, Sep 9, 2021

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 16, 2017—Jun 16, 2021

**MAP LEGEND**

**MAP INFORMATION**

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
530scl	Aptos loam, 15 to 30 percent slopes	0.0	0.0%
<b>Subtotals for Soil Survey Area</b>		<b>0.0</b>	<b>0.0%</b>
<b>Totals for Area of Interest</b>		<b>1,109.4</b>	<b>100.0%</b>

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
110sc	Ben Lomond sandy loam, 5 to 15 percent slopes	0.5	0.0%
149sc	Madonna loam, 15 to 30 percent slopes	40.7	3.7%
510	Casrock-Skyridge-Rock outcrop complex, 8 to 30 percent slopes	41.0	3.7%
516	Ben Lomond gravelly sandy loam, 15 to 30 percent slopes	250.0	22.5%
517	Ben Lomond-Casrock complex, 30 to 50 percent slopes	381.7	34.4%
518	Ben Lomond-Casrock complex, 50 to 75 percent slopes	297.3	26.8%
519	Ben Lomond-Felton complex, 30 to 75 percent slopes	3.6	0.3%
530	Aptos loam, 15 to 30 percent slopes	28.6	2.6%
531	Aptos Loam, 30 to 50 percent slopes	0.8	0.1%
567	Sanikara-Mouser-Rock outcrop complex, 50 to 75 percent slopes	13.3	1.2%
569	Katykat-Sanikara complex, 8 to 30 percent slopes	3.0	0.3%
W	Water	2.7	0.2%
<b>Subtotals for Soil Survey Area</b>		<b>1,063.3</b>	<b>95.8%</b>
<b>Totals for Area of Interest</b>		<b>1,109.4</b>	<b>100.0%</b>

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
110	Ben Lomond sandy loam, 5 to 15 percent slopes	0.0	0.0%
149	Madonna loam, 15 to 30 percent slopes	11.8	1.1%
510scl	Casrock-Skyridge-Rock outcrop complex, 8 to 30 percent slopes	3.8	0.3%

## Custom Soil Resource Report

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
516scl	Ben Lomond gravelly sandy loam, 15 to 30 percent slopes	21.4	1.9%
519scl	Ben Lomond-Felton complex, 30 to 75 percent slopes	1.1	0.1%
530scl	Aptos loam, 15 to 30 percent slopes	7.6	0.7%
<b>Subtotals for Soil Survey Area</b>		<b>45.8</b>	<b>4.1%</b>
<b>Totals for Area of Interest</b>		<b>1,109.4</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

## Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.



## San Mateo Area, California

### 530scl—Aptos loam, 15 to 30 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2pcmd  
*Elevation:* 1,830 to 3,000 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Aptos and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Aptos

##### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone

##### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 4 inches:* loam  
*Bt1 - 4 to 14 inches:* loam  
*Bt2 - 14 to 28 inches:* clay loam  
*Cr - 28 to 59 inches:* bedrock

##### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 39 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.03 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.2 to 0.4 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

**Minor Components**

**Skyridge**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Ben lomond**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Felton**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Casrock**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## Santa Clara Area, California, Western Part

### 110sc—Ben Lomond sandy loam, 5 to 15 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2pcms  
*Elevation:* 400 to 3,000 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 54 to 57 degrees F  
*Frost-free period:* 220 to 230 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Ben lomond and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ben Lomond

##### Setting

*Landform:* Ridges, mountain slopes  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex  
*Parent material:* Residuum weathered from sandstone and/or residuum weathered from granite

##### Typical profile

*Oi - 0 to 2 inches:* slightly decomposed plant material  
*A1 - 2 to 7 inches:* sandy loam  
*A2 - 7 to 19 inches:* sandy loam  
*B - 19 to 30 inches:* sandy loam  
*C - 30 to 46 inches:* sandy loam  
*Cr - 46 to 50 inches:* bedrock

##### Properties and qualities

*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* 40 to 60 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.03 to 0.28 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

**Minor Components**

**Catelli**

*Percent of map unit:* 4 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Nisene**

*Percent of map unit:* 3 percent  
*Landform:* Mountain slopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Felton**

*Percent of map unit:* 2 percent  
*Landform:* Ridges, mountain slopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

**Aptos**

*Percent of map unit:* 2 percent  
*Landform:* Hillslopes, ridges  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

**Lompico**

*Percent of map unit:* 2 percent  
*Landform:* Ridges, mountain slopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

**Sur**

*Percent of map unit:* 1 percent  
*Landform:* Mountainsides  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Zayante**

*Percent of map unit:* 1 percent  
*Landform:* Hills, mountains  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Mountainflank, side slope  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**149sc—Madonna loam, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2pcmx  
*Elevation:* 600 to 4,500 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 54 to 57 degrees F  
*Frost-free period:* 220 to 245 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Madonna and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Madonna**

**Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone and/or residuum weathered from shale

**Typical profile**

*A1 - 0 to 7 inches:* loam  
*A2 - 7 to 16 inches:* loam  
*B - 16 to 23 inches:* loam  
*Cr - 23 to 35 inches:* bedrock

**Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None



## Custom Soil Resource Report

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Very low (about 3.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C

*Ecological site:* R004BC019CA - LOAMY

*Hydric soil rating:* No

### Minor Components

#### Lompico

*Percent of map unit:* 6 percent

*Landform:* Ridges, mountain slopes

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop, mountainflank

*Down-slope shape:* Convex, concave

*Across-slope shape:* Linear, convex

*Hydric soil rating:* No

#### Maymen

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Mountaintop, upper third of mountainflank,  
center third of mountainflank, lower third of mountainflank

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

#### Hecker

*Percent of map unit:* 4 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Hydric soil rating:* No

## 510—Casrock-Skyridge-Rock outcrop complex, 8 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2110g

*Elevation:* 2,400 to 3,120 feet

*Mean annual precipitation:* 40 to 60 inches

*Mean annual air temperature:* 55 to 59 degrees F

*Frost-free period:* 200 to 250 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Casrock and similar soils: 35 percent*

*Skyridge and similar soils: 30 percent*

*Rock outcrop: 25 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Casrock**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*A1 - 0 to 5 inches: sandy loam*

*A2 - 5 to 11 inches: gravelly sandy clay loam*

*A3 - 11 to 21 inches: gravelly sandy clay loam*

*Bw - 21 to 32 inches: very gravelly sandy clay loam*

*R - 32 to 36 inches: bedrock*

**Properties and qualities**

*Slope: 8 to 30 percent*

*Depth to restrictive feature: 20 to 40 inches to lithic bedrock*

*Drainage class: Well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)*

*Available water supply, 0 to 60 inches: Low (about 3.5 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 4e*

*Hydrologic Soil Group: B*

*Ecological site: F004BN103CA - Upper elevation mountain slopes*

*Hydric soil rating: No*

**Description of Skyridge**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*Oi - 0 to 1 inches: slightly decomposed plant material*

## Custom Soil Resource Report

*A - 1 to 10 inches:* gravelly fine sandy loam

*R - 10 to 14 inches:* bedrock

### Properties and qualities

*Slope:* 8 to 30 percent

*Depth to restrictive feature:* 8 to 20 inches to lithic bedrock

*Drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.03 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.1 to 0.2 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* D

*Ecological site:* F004BN103CA - Upper elevation mountain slopes

*Hydric soil rating:* No

### Description of Rock Outcrop

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Convex

*Across-slope shape:* Convex

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* Unranked

### Minor Components

#### Ben lomond

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Casrock, sandy loam, conglomerate bedrock

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Upper third of mountainflank

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

## 516—Ben Lomond gravelly sandy loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 1nwzd  
*Elevation:* 640 to 3,080 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Ben lomond and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Ben Lomond

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material  
*A<sub>1</sub> - 1 to 6 inches:* gravelly sandy loam  
*A<sub>2</sub> - 6 to 13 inches:* sandy loam  
*B<sub>w</sub> - 13 to 28 inches:* sandy loam  
*BC - 28 to 47 inches:* gravelly sandy loam  
*Cr - 47 to 51 inches:* bedrock

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 39 to 55 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>):* Moderately low to moderately high (0.03 to 0.28 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

## Custom Soil Resource Report

*Land capability classification (nonirrigated): 4e*

*Hydrologic Soil Group: A*

*Ecological site: F004BN100CA - Fog-influenced, low elevation mountain slopes*

*Hydric soil rating: No*

### Minor Components

#### Felton

*Percent of map unit: 10 percent*

*Landform: Mountains*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Hydric soil rating: No*

#### Aptos

*Percent of map unit: 5 percent*

*Landform: Mountains*

*Landform position (two-dimensional): Shoulder, backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Hydric soil rating: No*

#### Ultic haploxerolls

*Percent of map unit: 5 percent*

*Landform: Mountains*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Hydric soil rating: No*

## 517—Ben Lomond-Casrock complex, 30 to 50 percent slopes

### Map Unit Setting

*National map unit symbol: 216b8*

*Elevation: 650 to 3,140 feet*

*Mean annual precipitation: 40 to 60 inches*

*Mean annual air temperature: 55 to 59 degrees F*

*Frost-free period: 200 to 250 days*

*Farmland classification: Not prime farmland*

### Map Unit Composition

*Ben lomond and similar soils: 65 percent*

*Casrock and similar soils: 20 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*



## Description of Ben Lomond

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material  
*A<sub>1</sub> - 1 to 6 inches:* gravelly sandy loam  
*A<sub>2</sub> - 6 to 13 inches:* sandy loam  
*B<sub>w</sub> - 13 to 28 inches:* sandy loam  
*BC - 28 to 47 inches:* gravelly sandy loam  
*Cr - 47 to 51 inches:* bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 39 to 55 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>):* Moderately low to moderately high (0.03 to 0.28 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* A  
*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

## Description of Casrock

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Center third of mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*A<sub>1</sub> - 0 to 5 inches:* sandy loam  
*A<sub>2</sub> - 5 to 11 inches:* gravelly sandy clay loam  
*A<sub>3</sub> - 11 to 21 inches:* gravelly sandy clay loam  
*B<sub>w</sub> - 21 to 32 inches:* very gravelly sandy clay loam  
*R - 32 to 36 inches:* bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

## Custom Soil Resource Report

*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.01 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 1.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* F004BN103CA - Upper elevation mountain slopes  
*Hydric soil rating:* No

### Minor Components

#### Ultic haploxerolls

*Percent of map unit:* 10 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Skyridge

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## 518—Ben Lomond-Casrock complex, 50 to 75 percent slopes

### Map Unit Setting

*National map unit symbol:* 216b7  
*Elevation:* 960 to 3,020 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Ben lomond and similar soils:* 65 percent

## Custom Soil Resource Report

*Casrock and similar soils: 20 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Ben Lomond

#### Setting

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Center third of mountainflank*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Slope alluvium derived from sandstone*

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches: slightly decomposed plant material*

*A<sub>1</sub> - 1 to 6 inches: gravelly sandy loam*

*A<sub>2</sub> - 6 to 13 inches: sandy loam*

*B<sub>w</sub> - 13 to 28 inches: sandy loam*

*BC - 28 to 47 inches: gravelly sandy loam*

*Cr - 47 to 51 inches: bedrock*

#### Properties and qualities

*Slope: 50 to 75 percent*

*Depth to restrictive feature: 39 to 55 inches to paralithic bedrock*

*Drainage class: Well drained*

*Runoff class: Medium*

*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>): Moderately low to moderately high (0.03 to 0.28 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Low (about 4.7 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7e*

*Hydrologic Soil Group: A*

*Ecological site: F004BN100CA - Fog-influenced, low elevation mountain slopes*

*Hydric soil rating: No*

### Description of Casrock

#### Setting

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Slope alluvium derived from sandstone*

#### Typical profile

*A<sub>1</sub> - 0 to 5 inches: sandy loam*

*A<sub>2</sub> - 5 to 11 inches: gravelly sandy clay loam*

*A<sub>3</sub> - 11 to 21 inches: gravelly sandy clay loam*

*B<sub>w</sub> - 21 to 32 inches: very gravelly sandy clay loam*

*R - 32 to 36 inches: bedrock*

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.01 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 1.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B  
*Ecological site:* F004BN103CA - Upper elevation mountain slopes  
*Hydric soil rating:* No

### Minor Components

#### Ultic haploxerolls

*Percent of map unit:* 10 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Skyridge

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## 519—Ben Lomond-Felton complex, 30 to 75 percent slopes

### Map Unit Setting

*National map unit symbol:* 217wl  
*Elevation:* 2,010 to 2,560 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Ben lomond and similar soils: 45 percent*

*Felton and similar soils: 35 percent*

*Minor components: 20 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Ben Lomond

#### Setting

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Slope alluvium derived from sandstone*

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches: slightly decomposed plant material*

*A<sub>1</sub> - 1 to 6 inches: gravelly sandy loam*

*A<sub>2</sub> - 6 to 13 inches: sandy loam*

*B<sub>w</sub> - 13 to 28 inches: sandy loam*

*BC - 28 to 47 inches: gravelly sandy loam*

*Cr - 47 to 51 inches: bedrock*

#### Properties and qualities

*Slope: 30 to 75 percent*

*Depth to restrictive feature: 39 to 55 inches to paralithic bedrock*

*Drainage class: Well drained*

*Runoff class: Medium*

*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>): Moderately low to moderately high (0.03 to 0.28 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Low (about 4.7 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7e*

*Hydrologic Soil Group: A*

*Ecological site: F004BN100CA - Fog-influenced, low elevation mountain slopes*

*Hydric soil rating: No*

### Description of Felton

#### Setting

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Slope alluvium derived from siltstone*

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches: slightly decomposed plant material*

*A - 1 to 3 inches: fine sandy loam*



## Custom Soil Resource Report

*ABt1 - 3 to 11 inches: silt loam*  
*ABt2 - 11 to 19 inches: silty clay loam*  
*Bt1 - 19 to 30 inches: silty clay loam*  
*Bt2 - 30 to 57 inches: silty clay loam*  
*Bw - 57 to 75 inches: silty clay loam*  
*Cr - 75 to 77 inches: bedrock*

### Properties and qualities

*Slope: 30 to 75 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Drainage class: Well drained*  
*Runoff class: High*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.03 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Available water supply, 0 to 60 inches: High (about 9.2 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: B*  
*Ecological site: F004BN100CA - Fog-influenced, low elevation mountain slopes*  
*Hydric soil rating: No*

### Minor Components

#### Aptos

*Percent of map unit: 10 percent*  
*Landform: Mountains*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Mountainflank*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

#### Casrock

*Percent of map unit: 5 percent*  
*Landform: Mountains*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Mountaintop*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

#### Ultic haploxerolls

*Percent of map unit: 5 percent*  
*Landform: Mountains*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Mountaintop*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

## 530—Aptos loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 1t6ck  
*Elevation:* 1,830 to 3,000 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Aptos and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Aptos

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone

#### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 4 inches:* loam  
*Bt1 - 4 to 14 inches:* loam  
*Bt2 - 14 to 28 inches:* clay loam  
*Cr - 28 to 59 inches:* bedrock

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 39 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.03 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.2 to 0.4 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C

## Custom Soil Resource Report

*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

### Minor Components

#### **Ben lomond**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Felton**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Casrock**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Skyridge**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **531—Aptos Loam, 30 to 50 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 217ws  
*Elevation:* 2,460 to 2,640 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Aptos and similar soils:* 80 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Aptos

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Mountaintop, mountainflank

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from mudstone

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material

*A - 1 to 4 inches:* loam

*B<sub>t1</sub> - 4 to 14 inches:* loam

*B<sub>t2</sub> - 14 to 28 inches:* clay loam

*Cr - 28 to 59 inches:* bedrock

#### Properties and qualities

*Slope:* 30 to 50 percent

*Depth to restrictive feature:* 20 to 39 inches to paralithic bedrock

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>):* Very low to moderately low (0.00 to 0.03 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.2 to 0.4 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 2.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* C

*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes

*Hydric soil rating:* No

### Minor Components

#### Felton

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop, mountainflank

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Ben lomond

*Percent of map unit:* 5 percent

*Landform:* Mountains

## Custom Soil Resource Report

*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Casrock**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Skyridge**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **567—Sanikara-Mouser-Rock outcrop complex, 50 to 75 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 20kv1  
*Elevation:* 390 to 3,450 feet  
*Mean annual precipitation:* 30 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 300 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Sanikara and similar soils:* 45 percent  
*Mouser and similar soils:* 30 percent  
*Rock outcrop:* 20 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Sanikara**

#### **Setting**

*Landform:* Mountains, hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, convex



## Custom Soil Resource Report

*Parent material:* Colluvium derived from graywacke and/or residuum weathered from graywacke

### Typical profile

*Oi - 0 to 2 inches:* slightly decomposed plant material  
*A1 - 2 to 4 inches:* very cobbly loam  
*A2 - 4 to 12 inches:* extremely cobbly loam  
*R - 12 to 22 inches:* bedrock

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 0.1 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* F015XY015CA - Loamy Mountains >40"ppt  
*Hydric soil rating:* No

## Description of Mouser

### Setting

*Landform:* Mountains, hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope  
*Down-slope shape:* Concave, convex, linear  
*Across-slope shape:* Concave, linear  
*Parent material:* Colluvium derived from sandstone and siltstone and/or residuum weathered from sandstone and siltstone

### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A1 - 1 to 4 inches:* gravelly sandy loam  
*A2 - 4 to 11 inches:* gravelly sandy loam  
*Bt1 - 11 to 21 inches:* gravelly sandy loam  
*Bt2 - 21 to 59 inches:* gravelly sandy loam

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.0 to 0.1 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Low (about 5.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* F015XY015CA - Loamy Mountains >40"ppt  
*Hydric soil rating:* No

### Description of Rock Outcrop

#### Setting

*Landform:* Mountains, hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Indurated graywacke

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydric soil rating:* Unranked

### Minor Components

#### Katykat

*Percent of map unit:* 3 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Mountaintop, upper third of mountainflank, center third of mountainflank, lower third of mountainflank  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

#### Santerhill

*Percent of map unit:* 2 percent  
*Landform:* Mountains, hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

## 569—Katykat-Sanikara complex, 8 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 20ktz  
*Elevation:* 360 to 3,390 feet  
*Mean annual precipitation:* 30 to 60 inches  
*Mean annual air temperature:* 55 to 61 degrees F  
*Frost-free period:* 200 to 300 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Katykat and similar soils:* 60 percent  
*Sanikara and similar soils:* 20 percent  
*Mouser and similar soils:* 15 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Katykat

#### Setting

*Landform:* Mountains, hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, convex  
*Parent material:* Colluvium derived from mudstone and/or colluvium derived from sandstone and/or residuum weathered from sandstone and/or residuum weathered from mudstone

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material  
*A<sub>1</sub> - 1 to 4 inches:* loam  
*A<sub>2</sub> - 4 to 8 inches:* gravelly loam  
*B<sub>t1</sub> - 8 to 14 inches:* gravelly clay loam  
*B<sub>t2</sub> - 14 to 22 inches:* gravelly clay loam  
*B<sub>t3</sub> - 22 to 33 inches:* paragravelly clay loam  
*B<sub>t4</sub> - 33 to 50 inches:* very paragravelly clay loam  
*B<sub>Ct1</sub> - 50 to 60 inches:* extremely paragravelly clay loam  
*B<sub>Ct2</sub> - 60 to 71 inches:* extremely paragravelly loam

#### Properties and qualities

*Slope:* 8 to 30 percent  
*Depth to restrictive feature:* 39 to 60 inches to densic material  
*Drainage class:* Well drained  
*Runoff class:* Medium

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.0 to 0.1 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 6.9 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C

*Ecological site:* F015XY015CA - Loamy Mountains >40"ppt

*Hydric soil rating:* No

### Description of Sanikara

#### Setting

*Landform:* Mountains, hillslopes

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop, upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, convex

*Parent material:* Colluvium derived from graywacke and/or residuum weathered from graywacke

#### Typical profile

*A - 0 to 4 inches:* very gravelly sandy clay loam

*Bw - 4 to 15 inches:* very gravelly sandy clay loam

*R - 15 to 25 inches:* bedrock

#### Properties and qualities

*Slope:* 8 to 30 percent

*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* D

*Ecological site:* F015XY015CA - Loamy Mountains >40"ppt

*Hydric soil rating:* No

### Description of Mouser

#### Setting

*Landform:* Hillslopes, mountains

*Landform position (two-dimensional):* Backslope

## Custom Soil Resource Report

*Landform position (three-dimensional):* Upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope

*Down-slope shape:* Concave, convex, linear

*Across-slope shape:* Concave, linear

*Parent material:* Colluvium derived from sandstone and/or residuum weathered from sandstone

### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material

*A1 - 1 to 6 inches:* gravelly sandy loam

*A2 - 6 to 9 inches:* very gravelly loam

*Bt1 - 9 to 20 inches:* gravelly loam

*Bt2 - 20 to 35 inches:* gravelly loam

*Bt3 - 35 to 60 inches:* gravelly loam

### Properties and qualities

*Slope:* 8 to 30 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.0 to 0.1 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 7.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* F015XY010CA - Hills >40"ppt

*Hydric soil rating:* No

### Minor Components

#### Santerhill

*Percent of map unit:* 5 percent

*Landform:* Mountains, hillslopes

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Upper third of mountainflank, center third of mountainflank, lower third of mountainflank, side slope

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, convex

*Hydric soil rating:* No



## **W—Water**

### **Map Unit Setting**

*National map unit symbol:* 1qsvr

*Elevation:* 0 to 1,920 feet

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Water:* 100 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Water**

#### **Setting**

*Landform:* Lakes, streams, salt marshes, rivers, mud flats, flood-tidal deltas, drainageways, shorelines, bays (geom.), bay bottoms

## Santa Cruz County, California

### 110—Ben Lomond sandy loam, 5 to 15 percent slopes

#### Map Unit Setting

*National map unit symbol:* h9d0  
*Elevation:* 400 to 3,000 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 54 to 57 degrees F  
*Frost-free period:* 220 to 230 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Ben lomond and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ben Lomond

##### Setting

*Landform:* Ridges, mountain slopes  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex  
*Parent material:* Residuum weathered from sandstone and/or residuum weathered from granite

##### Typical profile

*Oi - 0 to 2 inches:* slightly decomposed plant material  
*A1 - 2 to 7 inches:* sandy loam  
*A2 - 7 to 19 inches:* sandy loam  
*B - 19 to 30 inches:* sandy loam  
*C - 30 to 46 inches:* sandy loam  
*Cr - 46 to 50 inches:* bedrock

##### Properties and qualities

*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* 40 to 60 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.03 to 0.28 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 6.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

**Minor Components**

**Catelli**

*Percent of map unit:* 4 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Nisene**

*Percent of map unit:* 3 percent  
*Landform:* Mountain slopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Aptos**

*Percent of map unit:* 2 percent  
*Landform:* Hillslopes, ridges  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex, linear  
*Hydric soil rating:* No

**Felton**

*Percent of map unit:* 2 percent  
*Landform:* Ridges, mountain slopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

**Lompico**

*Percent of map unit:* 2 percent  
*Landform:* Ridges, mountain slopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

**Sur**

*Percent of map unit:* 1 percent  
*Landform:* Mountainsides  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Zayante**

*Percent of map unit:* 1 percent  
*Landform:* Hills, mountains  
*Landform position (two-dimensional):* Summit, backslope  
*Landform position (three-dimensional):* Mountainflank, side slope  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**149—Madonna loam, 15 to 30 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2pcmx  
*Elevation:* 600 to 4,500 feet  
*Mean annual precipitation:* 35 to 60 inches  
*Mean annual air temperature:* 54 to 57 degrees F  
*Frost-free period:* 220 to 245 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Madonna and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Madonna**

**Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone and/or residuum weathered from shale

**Typical profile**

*A1 - 0 to 7 inches:* loam  
*A2 - 7 to 16 inches:* loam  
*B - 16 to 23 inches:* loam  
*Cr - 23 to 35 inches:* bedrock

**Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Very low (about 3.0 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C

*Ecological site:* R004BC019CA - LOAMY

*Hydric soil rating:* No

### **Minor Components**

#### **Lompico**

*Percent of map unit:* 6 percent

*Landform:* Ridges, mountain slopes

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop, mountainflank

*Down-slope shape:* Convex, concave

*Across-slope shape:* Linear, convex

*Hydric soil rating:* No

#### **Maymen**

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Mountaintop, upper third of mountainflank, center third of mountainflank, lower third of mountainflank

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

#### **Hecker**

*Percent of map unit:* 4 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Hydric soil rating:* No

## **510scl—Casrock-Skyridge-Rock outcrop complex, 8 to 30 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2pcmh

*Elevation:* 2,400 to 3,120 feet

*Mean annual precipitation:* 40 to 60 inches

*Mean annual air temperature:* 55 to 59 degrees F

*Frost-free period:* 200 to 250 days



**Map Unit Composition**

*Casrock and similar soils: 35 percent*

*Skyridge and similar soils: 30 percent*

*Rock outcrop: 25 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Casrock**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*A1 - 0 to 5 inches: sandy loam*

*A2 - 5 to 11 inches: gravelly sandy clay loam*

*A3 - 11 to 21 inches: gravelly sandy clay loam*

*Bw - 21 to 32 inches: very gravelly sandy clay loam*

*R - 32 to 36 inches: bedrock*

**Properties and qualities**

*Slope: 8 to 30 percent*

*Depth to restrictive feature: 20 to 40 inches to lithic bedrock*

*Drainage class: Well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.01 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)*

*Available water supply, 0 to 60 inches: Low (about 3.5 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 4e*

*Hydrologic Soil Group: B*

*Ecological site: F004BN103CA - Upper elevation mountain slopes*

*Hydric soil rating: No*

**Description of Skyridge**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*Oi - 0 to 1 inches: slightly decomposed plant material*

## Custom Soil Resource Report

*A - 1 to 10 inches:* gravelly fine sandy loam

*R - 10 to 14 inches:* bedrock

### Properties and qualities

*Slope:* 8 to 30 percent

*Depth to restrictive feature:* 8 to 20 inches to lithic bedrock

*Drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.03 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.1 to 0.2 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* D

*Ecological site:* F004BN103CA - Upper elevation mountain slopes

*Hydric soil rating:* No

### Description of Rock Outcrop

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Convex

*Across-slope shape:* Convex

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* Unranked

### Minor Components

#### Ben lomond

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Casrock, sandy loam, conglomerate bedrock

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Upper third of mountainflank

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

## 516scl—Ben Lomond gravelly sandy loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2pcmj  
*Elevation:* 640 to 3,080 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Ben lomond and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Ben Lomond

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

#### Typical profile

*O<sub>i</sub> - 0 to 1 inches:* slightly decomposed plant material  
*A<sub>1</sub> - 1 to 6 inches:* gravelly sandy loam  
*A<sub>2</sub> - 6 to 13 inches:* sandy loam  
*B<sub>w</sub> - 13 to 28 inches:* sandy loam  
*BC - 28 to 47 inches:* gravelly sandy loam  
*Cr - 47 to 51 inches:* bedrock

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 39 to 55 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (K<sub>sat</sub>):* Moderately low to moderately high (0.03 to 0.28 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

## Custom Soil Resource Report

*Land capability classification (nonirrigated): 4e*

*Hydrologic Soil Group: A*

*Ecological site: F004BN100CA - Fog-influenced, low elevation mountain slopes*

*Hydric soil rating: No*

### Minor Components

#### Felton

*Percent of map unit: 10 percent*

*Landform: Mountains*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Hydric soil rating: No*

#### Aptos

*Percent of map unit: 5 percent*

*Landform: Mountains*

*Landform position (two-dimensional): Shoulder, backslope*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Hydric soil rating: No*

#### Ultic haploxerolls

*Percent of map unit: 5 percent*

*Landform: Mountains*

*Landform position (two-dimensional): Summit*

*Landform position (three-dimensional): Mountaintop*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Hydric soil rating: No*

## 519scl—Ben Lomond-Felton complex, 30 to 75 percent slopes

### Map Unit Setting

*National map unit symbol: 2pcmm*

*Elevation: 2,010 to 2,560 feet*

*Mean annual precipitation: 40 to 60 inches*

*Mean annual air temperature: 55 to 59 degrees F*

*Frost-free period: 200 to 250 days*

*Farmland classification: Not prime farmland*

### Map Unit Composition

*Ben lomond and similar soils: 45 percent*

*Felton and similar soils: 35 percent*

*Minor components: 20 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Ben Lomond

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Slope alluvium derived from sandstone

### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A1 - 1 to 6 inches:* gravelly sandy loam  
*A2 - 6 to 13 inches:* sandy loam  
*Bw - 13 to 28 inches:* sandy loam  
*BC - 28 to 47 inches:* gravelly sandy loam  
*Cr - 47 to 51 inches:* bedrock

### Properties and qualities

*Slope:* 30 to 75 percent  
*Depth to restrictive feature:* 39 to 55 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.03 to 0.28 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

## Description of Felton

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Slope alluvium derived from siltstone

### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 3 inches:* fine sandy loam  
*ABt1 - 3 to 11 inches:* silt loam  
*ABt2 - 11 to 19 inches:* silty clay loam  
*Bt1 - 19 to 30 inches:* silty clay loam  
*Bt2 - 30 to 57 inches:* silty clay loam  
*Bw - 57 to 75 inches:* silty clay loam  
*Cr - 75 to 77 inches:* bedrock



## Custom Soil Resource Report

### Properties and qualities

*Slope:* 30 to 75 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low (0.01 to 0.03 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* High (about 9.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* B

*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes

*Hydric soil rating:* No

### Minor Components

#### Aptos

*Percent of map unit:* 10 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Casrock

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Ultic haploxerolls

*Percent of map unit:* 5 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountaintop

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

## 530scl—Aptos loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* 2dxl5  
*Elevation:* 1,830 to 3,000 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 55 to 59 degrees F  
*Frost-free period:* 200 to 250 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Aptos and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Aptos

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone

#### Typical profile

*Oi - 0 to 1 inches:* slightly decomposed plant material  
*A - 1 to 4 inches:* loam  
*Bt1 - 4 to 14 inches:* loam  
*Bt2 - 14 to 28 inches:* clay loam  
*Cr - 28 to 59 inches:* bedrock

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 39 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.03 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline (0.2 to 0.4 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C

## Custom Soil Resource Report

*Ecological site:* F004BN100CA - Fog-influenced, low elevation mountain slopes  
*Hydric soil rating:* No

### Minor Components

#### **Casrock**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Ben lomond**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Felton**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop, mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### **Skyridge**

*Percent of map unit:* 5 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

# References

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- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)