



Board Meeting Agenda

October 22, 2026 | 9:00 AM – 11:00 AM

Meeting Location: 1221 Farmers Lane, Suite F, Santa Rosa, CA 95405

The public should attend Board meetings in-person to ensure the ability to observe and participate. Remote teleconference access is provided for the public's convenience and in the event that a Director requests remote participation due to just cause pursuant to Government Code section 54953.8.3 or the Board of Directors conducts a teleconference meeting pursuant to Government Code Sections 54953.8 and 54953.8.2 during an emergency. Please be advised that if a Director is not participating in the meeting remotely for just cause or the Board of Directors is not conducting a teleconference meeting during an emergency, remote participation for members of the public is provided for convenience only, and in the event that the Zoom teleconference connection malfunctions for any reason, the Board of Directors reserves the right to conduct the meeting without remote access and take action on any agenda item. The public may participate telephonically or electronically via the methods below:

Remote Access: Members of the staff and public can participate remotely using the following options:

<https://us02web.zoom.us/j/87042160724>

Meeting ID: 870 4216 0724
+16699009128,89546736157# US (San Jose)

Requests for disability related modifications or accommodations, aids, or services must be made to Jen Franco, Board Secretary, at 707-569-1448 or jfranco@sonomarc.org during regular business hours at least 48 hours prior to the time of the meeting.

- 1. Call to Order, Determination of a Quorum, Introductions**
- 2. Additions/Changes to the Agenda** (Gov. Code 54954.2 (B))
- 3. Consent Calendar: Approval of October Board Meeting Agenda, September Board Meeting Minutes, October Executive Committee Meeting Minutes**
- 4. Public Comment:** Limited to three (3) minutes per person. The Board will hear public comments during this time on agenda or non-agenda items where the Board has jurisdiction. Comments are limited to three minutes per person, not to exceed a total of 15 minutes for all participants. If participants want their comments to be entered into the minutes for the meeting, they must submit a written copy of their comments, not to exceed four pages. At this time the public may indicate agenda items they wish to address prior to Board action on that item.
- 5. Information Items**
 - A. NRCS Report**
 - B. Stewardship Assistance Program** (Christine Kuehn, Anya Nejedlo)

6. Action Items

- A. **Approval of Modini Preserve Cal VTP PSA** (Jason Wells)
- B. **Adoption of Resolution No. 2627-003 Approving the Form of and Authorizing the Execution of a Memorandum of Understanding and Authorizing Participation in the Special District Risk Management Authority's Health Benefits Program** (Jen Franco)

7. Update Items

- A. **Executive Committee** – *See meeting minutes from October 12, 2026*
- B. **Groundwater Sustainability Agency Reports** (GSA Directors, Alternates & Staff)
- C. **Director's Reports**
- D. **Executive Director Report**

8. Future Agenda Items

9. Adjournment

Materials related to items on this agenda, included in the agenda packet or distributed to the Board after distribution of the agenda packet, are available for public inspection at 1221 Farmers Lane, Suite F, Santa Rosa, CA, 95405, by appointment. To request board packet information, please contact Christine Kuehn at (707) 569-1448 or ckuehn@sonomarcd.org.

Public Notice: In compliance with the Americans with Disabilities Act and Government Code Section 54954.2, if special assistance is needed to participate in a Board meeting, please contact Christine Kuehn at (707) 569-1448 or ckuehn@sonomarcd.org. Notification of at least 48 hours prior to meeting time will assist staff in assuring that reasonable arrangements can be made to provide accessibility at the meeting.

RCD Board

Bruce Abelli-Amen, Chair	Dennis Murphy, Associate Director
Steve Worrell, Vice Chair	Chris Peterson, Associate Director
Ariana Reguzzoni, Director	Allyson Souza, Associate Director
Isaac Jenkins, Director	Brynn O'Donnell, Associate Director
John Nagle, Director	Rob Lawson, Associate Director
Fred Euphrat, Director	Delmar Friedrichsen, Emeritus Director
John Gorman, Director	Earle Cummings, Emeritus Director
	Walt Ryan, Emeritus Director
	Vickie Mulas, Emeritus Director
	Ron Roller, Emeritus Director in Memoriam

RCD Staff

Christine Kuehn, Executive Director	Jason Wells, Forestry Program Director
Anya Nejedlo, Deputy Director	Keith Abeles, Soil and Water Specialist
Jessica Pollitz, Engineering Director	Genevieve Tarino, Forester

Ari DeMarco , <i>Project Manager</i>	Karen Saler , <i>Community Engagement Assistant</i>
Fatima Burhan , <i>Project Manager</i>	Maria Wnorowski , <i>Community Engagement Program Manager</i>
Patti Aaron , <i>Community Engagement Specialist</i>	Jen Franco , <i>Operations & Human Resources Manager</i>
Colin Nicol , <i>Water Resources Project Manager</i>	Brett LeDuc , <i>Agricultural Project Manager</i>
Amy Tang , <i>Program Assistant</i>	Steven Fry , <i>Watershed Restoration Program Manager</i>
Bo Young , <i>Finance Manager</i>	Alek Wheeler-Quintanilla , <i>Forestry Technician</i>



Board Meeting Minutes

September 24, 2026 - 9:00 am

1221 Farmers Lane, Suite F

Santa Rosa, CA 95405

<https://us02web.zoom.us/j/87042160724>

(669) 900-9128

Meeting ID: 870 4216 0724

1. **Call to Order, Determination of a Quorum, Introductions:** Chair Bruce Abelli-Amen called the meeting to order at 9:00 am. A quorum was determined.
 Directors Present: Bruce Abelli-Amen, Steve Worrell (left at 10:02 am), John Nagle, Ariana Reguzzoni, Fred Euphrat, John Gorman.
 Directors Absent: Isaac Jenkins.
 Associate Directors Present: Dennis Murphy, Chris Peterson, Allyson Souza, Brynn O'Donnell.
 Associate Directors Absent: Rob Lawson.
 Staff Present: Anya Nejedlo, Bo Young, Jen Franco, Jessica Pollitz, Steven Fry, Fatima Burhan, Alek Wheeler-Quintanilla.
 Others Present: Chase Garcia, Katherine Korsak, Michael Miller.
2. **Additions/Changes to the Agenda (Gov. Code 54954.2 (B)):** None
3. **Consent Calendar:** Approval of August Board Meeting Agenda, July Board Meeting Minutes.
Motion to approve: John Nagle, **2nd:** Steve Worrell. Motion passed, 6 ayes.
Ayes: Abelli-Amen, Worrell, Nagle, Reguzzoni, Euphrat, Gorman.
Nays: None.
4. **Public Comment:** None.
5. **Information Items:**
 - A. **Natural Resources Conservation Service (NRCS) Report:** Chase Garcia, District Conservationist, provided a recap of Fiscal Year 2026, noting the Petaluma Service Center funded 82 total contracts. FY 2026 was the inaugural year for the Regenerative Pilot Program. Applications are being accepted on a continuous basis for FY 2027.
 - B. **Mark West PBR Planning & Implementation Project with Sonoma County Regional Parks Presentation:** Steven Fry, Watershed Restoration Program Manager, and Fatima Burhan, Project Manager, presented this item. They provided background on the project and site, an overview of the project scope, process-based restoration methods, and the implementation schedule. The Board asked questions and discussed.

6. Action Items:

- A. Approval of Investment Policy:** Katherine Korsak from Regional Government Services presented this item. State law requires an annual update to this policy, and she highlighted changes made from the previous fiscal year. The Board asked questions and discussed.

Motion to approve: Fred Euphrat, **2nd:** John Nagle. Motion passed, 6 ayes.

Ayes: Abelli-Amen, Worrell, Nagle, Reguzzoni, Euphrat, Gorman.

Nayes: None.

- B. Acceptance of the FY25-26 Q4 Investment Report:** Katherine Korsak from Regional Government Services presented this item and gave an overview of the investment portfolio as of June 30, 2026. The Board asked questions and discussed.

Motion to approve: John Nagle, **2nd:** John Gorman. Motion passed, 5 ayes.

Ayes: Abelli-Amen, Nagle, Reguzzoni, Euphrat, Gorman.

Nayes: None.

- C. Recommendation to Board of Supervisors for appointments to 4 RCD Director Positions** (currently held by Bruce Abelli-Amen, Isaac Jenkins, Frederick Euphrat, and John Nagle, with terms expiring on December 7, 2026): Board Chair Bruce Abelli-Amen presented this item, addressing the positions of Board Directors: Abelli-Amen, Jenkins, Euphrat and Nagle. All Board Directors expressed interest in continuing their service and our recommendation will be included in the Board of Supervisors consent calendar anticipated for November 3, 2026.

Motion to approve: Ariana Reguzzoni, **2nd:** Fred Euphrat. Motion passed, 5 ayes.

Ayes: Abelli-Amen, Nagle, Reguzzoni, Euphrat, Gorman.

Nayes: None.

D. Update Items:

- A. Executive Committee:** September 18, 2026, Executive Committee meeting notes were provided in the September 2026 Board packet.

B. Groundwater Sustainability Agency Reports:

- Director John Nagle is maintaining the Vice Chair position for Santa Rosa Plain. Santa Rosa Plain GSA completed their local public comment period for its 2026 Periodic Evaluation last month.
- Board Chair Bruce Abelli-Amen reported that Petaluma Valley GSA also completed their local public comment period for its 2026 Periodic Evaluation last month.
- The Advisory Committees are reviewing comments, developing implementation guidelines and working collaboratively with RCDs.
- Jessica Pollitz, Engineering Director, reported that Sonoma RCD is wrapping up a grant with Santa Rosa Plain GSA at the end of the month. Sonoma Valley GSA is continuing to work on 15% voluntary water reduction efforts and Sonoma RCD will help to implement in the future.

C. Director's Reports: None.

D. Executive Director Report: Anya Nejedlo, Deputy Director, highlighted receiving Sonoma County Board of Supervisors Gold Resolution last week and provided details for SRCD's 80th Anniversary events in October.

E. Future Agenda Items: None.

F. Adjournment: The meeting was adjourned at 10:35 am.

To: Sonoma RCD Board of Directors
From: Jason Wells, Director of Forestry
Re: Modini Preserve: CAL VTP Addendum

Project Background

Sonoma RCD has a long term relationship with All Hands Ecology (formerly Audubon Canyon Ranch), a non-profit conservation group and landowner in Sonoma and Marin counties. Their Fire Forward program is a leading implementer of beneficial prescribed fire practices in our region, and they often implement ecological restoration treatments on their preserve properties. SRCD completed a forest management plan for the Modini property in February 2025. Around that same time, SRCD completed a forest management plan for All Hands Ecology's Bouverie Preserve; the board subsequently approved a CAL VTP Addendum for a Project Specific Analysis (PSA) prepared by All Hands Ecology for that property. Approval of the Modini PSA would allow future grant-funded projects to have expedited compliance with the requirements of CEQA, and would further strengthen our working relationship with All Hands Ecology.

Project Funder

The PSA preparation was funded independently by All Hands Ecology. Review of the plan was supported by technical assistance contracts previously obtained by SRCD, through CALFIRE and NACD.

CEQA Compliance Background

The CAL VTP EIR is a Programmatic Environmental Impact Report (PEIR) which was prepared for the CA Board of Forestry and Fire Protection as a way to streamline CEQA compliance for forest and fuels management projects across the "treatable landscape" of California. The CAL VTP EIR is available for use by any public agency in California to comply with CEQA. The PEIR attempts to identify the entirety of adverse impacts which may occur from forest and fuels management activities across the treatable landscape, and requires that projects which use the PEIR for compliance with CEQA prepare a Project Specific Analysis (PSA) that analyzes applicable potential adverse impacts identified in the PEIR. Because the potential adverse impacts which may occur during forestry activities within the treatable landscape have already been identified, mitigation strategies have already been proposed, and these mitigations have gone through the public reporting process required by CEQA; projects analyzed using the methodology outlined in the CAL VTP do not need to go through the full CEQA process, including public comment. Instead, if the Public Agency finds that the project is within the scope of the CAL VTP EIR, the PSA is posted online and work can begin immediately.

Action Required

For the Modini Preserve PSA to be valid, it must be approved by the RCD Board of Directors.

Recommendation

The PSA for the Modini Preserve has been prepared by Brian Peterson, Fire Ecologist with All Hands Ecology, and reviewed by Sonoma RCD's Director of Forestry, Jason Wells, RPF, for accuracy and compliance with the CAL VTP EIR. Staff recommends that the Board approve the PSA so that future grant-funded work for fuel reduction on the property may be expedited.

Modini Cal VTP # 2024-05
Project Specific Analysis and Addendum to the CalVTP Program EIR

Prepared for:
Sonoma Resource Conservation District
Prepared by:
Brian Peterson: All Hands Ecology

Contributors:
Nomad Ecology



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Introduction

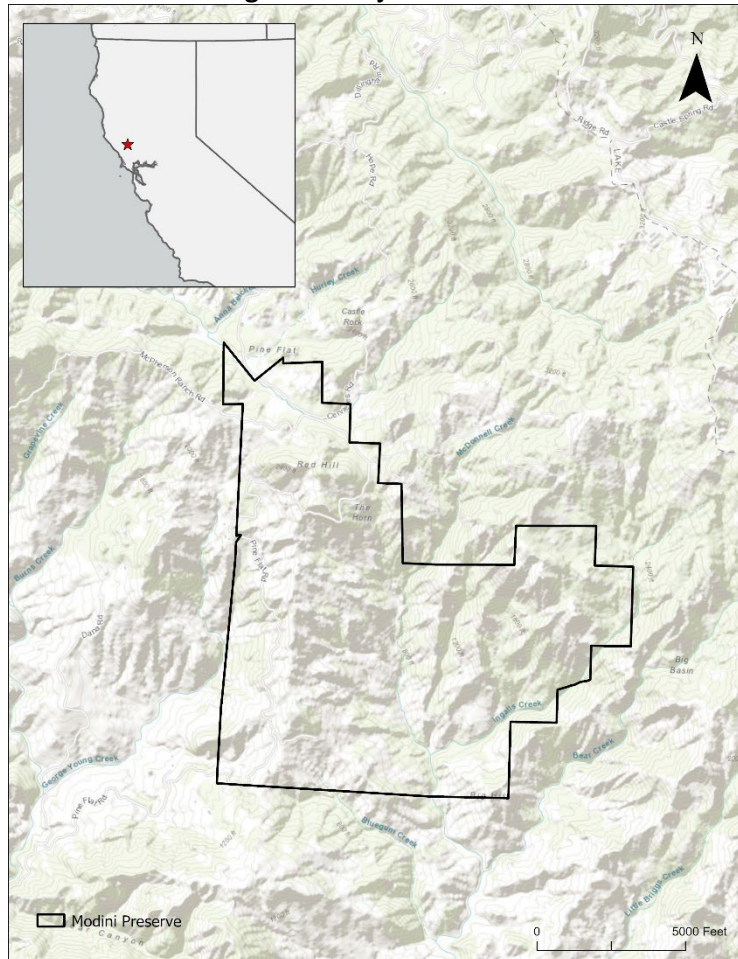
Project Overview and Document Purpose

Under the direction of the California Board of Forestry and Fire Protection, the Program Environmental Impact Report (PEIR) was prepared to evaluate the environmental impacts of the California Vegetation Treatment Program (CalVTP). The CalVTP includes various treatment activities designed to reduce wildfire hazards within State Responsibility Areas (SRA). A Project Specific Analysis (PSA) is required for individual projects. The purpose of the PSA is to: a) evaluate the conditions of the proposed site and proposed treatments to ensure they are within the scope of the PEIR, and b) ensure that all applicable Standard Project Requirements (SPRs) and mitigation measures are incorporated into the project.

Proposed Project

All Hands Ecology (AHE) proposes to implement vegetation treatment activities on 1,621 acres of the 2,863 acre Modini Preserve (hereafter referred to as the “Project”). The Modini Preserve (Preserve) is located within the ancestral lands of the Mishewal Wappo Tribe of Alexander Valley and consists of 2,863 acres of diverse ecosystems in the Mayacamas mountain range approximately 6.5 miles east of Geyserville and 6 miles west of Middleton on Pine Flat Road (Figure 1).

Figure 1: Project Location



Goals, pertaining to the CalVTP, of this project include ecological and shaded fuel break treatment types as delineated by the CalVTP and to use treatment activities consistent with those evaluated in the CalVTP including manual, mechanical, prescribed burning (broadcast or cultural burning, pile burning, and/or air curtain burning), prescribed grazing, and herbicide application.

The Preserve has a long history of human use, particularly relevant to this document is the use of fire as a cultural practice by Mishewal Wappo peoples. Forced removal of Mishewal Wappo peoples from their land resulted in a dramatic shift in land stewarding practices and has had lasting impacts on vegetation and resiliency of the preserve ecosystems.

The Preserve was most recently impacted by the 2019 Kincadee fire which burned the entire 1,621 acres of the Project Area. The Geyser fire also burned the entire Project area in 2004, a 15-year fire return interval (FRI). While severity of the Kincadee fire varied across the Preserve, the overall ecological impacts were relatively low with most ecosystems maintaining resiliency. Ecosystem resiliency is defined by an ecosystem's ability to maintain its species composition and structure after a disturbance event. More specifically here, the ability for the ecosystem to maintain its character after a wildland fire. Ecosystems within the Project area are considered to be in maintenance phase if fuel and vegetation structure

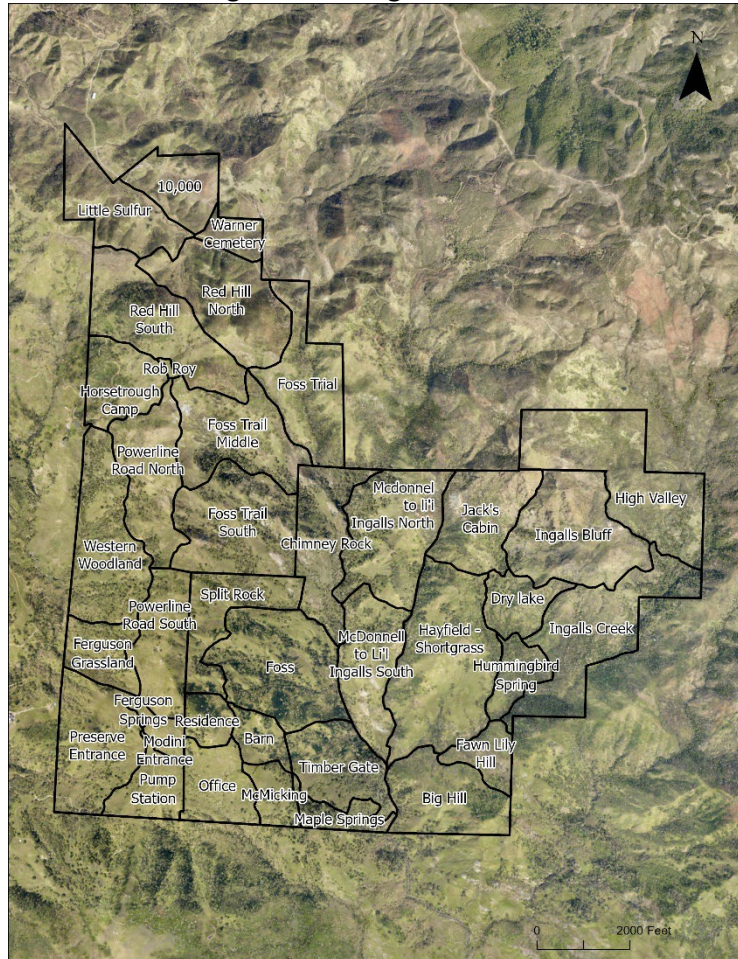
Project-Specific Analysis and Addendum

within an ecosystem are resilient to wildland fire under a broad span of fire conditions, barring the most extreme fire events. The maintenance phase condition assumes that vegetation and fuels management can be done on a cycle commensurate with expected FRI's for the ecosystem in question and that treatments are not fundamentally changing the species composition or structure of the ecosystem, but rather maintaining it.

Overall vegetation through various ecosystems within the Project area is showing good post-fire resiliency and the FRI is roughly intact for most ecosystems. Given these conditions, a majority of the Project area is considered to be in the maintenance phase of the management cycle. While a 15-year FRI for most ecosystems in the Project area is roughly within the acceptable tolerance or resiliency, it is on the higher bounds. Evidence of this before the Kincade Fire was most apparent in oak woodlands on the Preserve. Some oak woodlands were heavily encroached by young Douglas fir trees. Encroachment in many areas had reached the piercing phase. An advanced phase where the tops of the encroaching young Douglas fir trees were beginning to grow above the oak canopy. This advanced stage of encroachment is an indication of the outer bound of an appropriate FRI. Allowing oak woodlands to reach advanced stages of encroachment greatly increases the chance that the process cannot be reversed leading to loss of oak woodland habitat. Preferably, young trees would not be allowed to reach these sizes in the future, hence having a more frequent FRI or implementing other vegetation management treatment to disrupt tree and shrub recruitment.

The Preserve is organized into 38 management units, 27 of which are included in the Project (Figure 2). Management Units are delineated based on landscape features and ecosystem types. Ecosystem types found on the Preserve include chaparral, conifer forest, grassland, riparian, wetlands, and woodland (Table 1). Ecosystem types were derived from vegetation types mapped by the Sonoma County Vegetation Map as well as their associated vegetation management regimes.

Figure 2: Management Units



The proposed treatment types for the Project are shaded fuel break and ecological restoration. The goals of the Project include improving resilience to wildfire, improving wildlife habitat, increasing native flora diversity, reducing the potential of high-intensity wildfire, and returning ecosystems to their natural fire regimes. Treatment activities include prescribed burning, manual treatments, mechanical treatments, prescribed herbivory, and herbicide.

Table 1: Project Area Management Units & Ecosystem Types

Management Unit	Acres	Ecosystem Types
10,000*	0.79	Chaparral, Grassland, Conifer Forest
Barn	27	Grassland*, Woodland, Conifer Forest
Ferguson Grassland	45	Woodland, Grassland
Ferguson Springs	4.64	Grassland, Wetland
Foss	132	Grassland, Woodland, Conifer Forest, Riparian
Foss Trail	20.21	Grassland, Chaparral, Woodland, Conifer Forest

Project-Specific Analysis and Addendum

Foss Trail Middle	105	Grassland, Woodland , Chaparral, Conifer Forest
Foss Trail South	123	Grassland, Woodland , Chaparral, Conifer Forest, Wetland
Hayfield - Shortgrass	173	Grassland, Woodland , Chaparral, Conifer, Riparian
Horsetrough Camp	59	Grassland, Woodland, Conifer Forest
Hummingbird Spring	32	Woodland , Grassland, Chaparral Riparian
Little Sulfur	11	Conifer Forest , Woodland, Riparian
Maple Springs	26	Woodland , Grassland, Conifer Forest, Riparian
McDonnell to Li'l Ingalls South	83	Woodland, Grassland Chaparral, Conifer Forest, Riparian
McMicking	27	Grassland , Woodland
Modini Entrance	14	Grassland , Woodland
Office	56	Grassland , Woodland, Wetland
Powerline Road North	90	Grassland , Woodland, Chaparral
Powerline Road South	74	Grassland , Woodland, Conifer Forest
Preserve Entrance	104	Grassland , Woodland, Conifer Forest, Wetland
Pump Station	43	Grassland , Woodland
Red Hill North	53	Woodland, Conifer Forest, Grassland , Riparian
Red Hill South	67	Grassland, Woodland , Chaparral, Conifer Forest,
Residence	25	Grassland , Woodland, Conifer Forest
Rob Roy	2	Grassland , Woodland
Split Rock	71	Grassland, Woodland , Chaparral, Conifer Forest
Timber Gate	74	Woodland , Conifer Forest, Grassland, Riparian
Warner Cemetery	10	Conifer Forest , Grassland, Woodland Chaparral, Riparian
Western Woodland	114	Woodland , Grassland, Chaparral, Riparian

Bold indicates vegetation type dominance within management unit

Agency Roles

According to the PEIR, the responsible agency for the proposed project is the project proponent. The project proponent is: “a public agency providing funding for vegetation treatment or with land ownership, land management, or other regulatory responsibility in the treatable landscape and seeking to implement vegetation treatments consistent with this PEIR for CEQA compliance.” The PEIR states: “the CalVTP PEIR will be available for the responsible agencies (project proponent) to use for CEQA compliance when they are seeking to approve treatment projects that are consistent with the CalVTP.” If the proposed project is not found to be within the scope of the PEIR and requires additional environmental documentation (Negative declaration, Mitigated Negative Declaration, Environmental Impact Report, or other CEQA document etc.), then the project proponent can serve in the role of a lead agency in the preparation of the required additional environmental documentation.

Project-Specific Analysis and Addendum

Sonoma Resource Conservation District (Sonoma RCD) will serve as the project proponent for this project and AHE will be the lead implementation entity demonstrating AHE's role as the primary manager, planner, and implementor, and monitoring entity of project treatment.

Purpose of PSA

This document serves as the PSA to evaluate whether the proposed project treatments are within the scope of the CalVTP PEIR. If proposed treatments are found to be consistent with the treatments and environmental effects analyzed in the PEIR, then no additional CEQA review is required. An Addendum in the form of revisions or changes to a previously certified EIR is appropriate when said changes and revisions would result in no new or substantially more severe significant environmental impacts, consistent with CEQA Section Cal. Pub. Resources Code § 21166. Cal. Code Regs. tit. 14 § 15162 through 15164, and § 15168.

Proposed Project Revisions

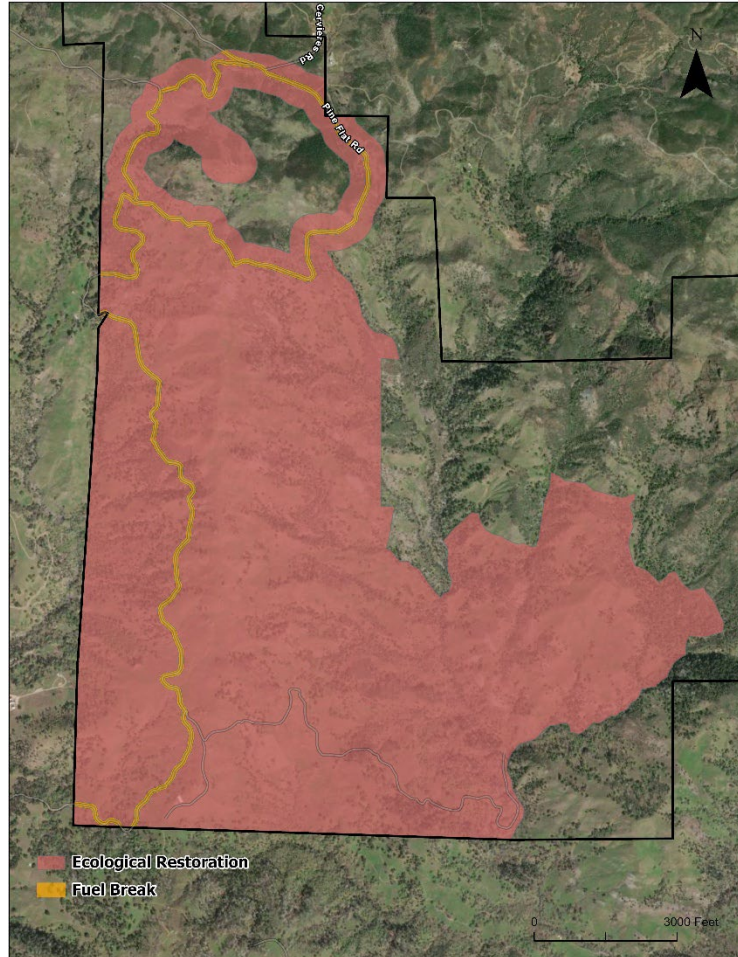
Project Outside of the Treatable Landscape

One of the requirements of the PEIR is that a proposed project is within the treatable landscape (geographic scope) analyzed in the PEIR. If a proposed project includes areas outside of this geographic scope, those areas must share the same landscape conditions as areas analyzed in the PEIR. The proposed Project Includes 708 acres that fall outside of the treatable landscape analyzed in the PEIR. However, these 708 acres consist of landscape patches surrounded by treatable landscape, and they share the same landscape conditions as the surrounding treatable landscape areas. As a result, the environmental analysis in the PEIR is applicable and no additional CEQA review is required.

Treatment Description

The proposed treatment types for the Project are shaded fuel break and ecological restoration (Figure 3). The proposed treatment activities include prescribed burning, manual, mechanical, prescribed herbivory, and herbicide. The proposed treatment type and activities for the Project are consistent with those evaluated in the PEIR. Maintenance treatments, also covered in the PEIR, would consist of the same treatment types evaluated in the PEIR.

Figure 3: Project Treatment Types



Implementation of treatments would require 1-60 crew members and would largely be implemented during normal daytime work hours. The only exception being prescribed burning at night, which would require special permissions from Bay Area Air Quality District. Treatments would be on going on the preserve and a continuation of previous and current vegetation treatment efforts.

Treatment Type

Shaded Fuel Break

A shaded fuel break or grassland will be maintained for approximately 2 mile along Pin Flat Rd. Approximately 50 feet on each side of the road totaling 362 acres will be cleared of brush and small trees, <24" DBH, while maintaining a high canopy cover of overstory trees. Fuels generated from the treatment will be loped and scattered, burned in piles, or through broadcast burning. Shaded fuel breaks provide areas along access roads that support firefighting efforts by creating areas for staging and access.

Project-Specific Analysis and Addendum

Ecological Restoration

Ecological restoration treatments could be implemented on 1,308 acres of the Preserve to enhance native vegetation, habitat, and restore and maintain historic fire regimes, which would increase ecosystem resilience to wildfire.

Ecological Restoration goals of the Project include but are not limited to:

- Increase ecosystem resiliency to wildfires
- Restoring and maintaining fire as a process on the landscape
- Reducing surface fuels in forests vegetation types
- Reducing latter fuels in forest vegetation types including bay, Douglas fir, and shrub species
- Reducing threat of catastrophic wildfire
- Remove encroaching species in oak woodland
- Increasing native grass and forb diversity in the grasslands
- Provide prescribed fire training opportunities
- Provide a living laboratory for ecological fire management in Sonoma County

Treatments activities associated with ecological restoration would potentially occur on 1,308 acres in several vegetation types. Ecological restoration vegetation treatments will focus on maintaining fuel and vegetation structure and FRIs appropriate to maintain current woodland, forest, grassland, and chaparral vegetation types found within the Project Area. If any chaparral is encountered within the Project Area, it will be mapped and will not be treated, specifically to avoid type conversion of chaparral as stated in SPR BIO-5 of the PEIR. Pursuant to a decision made by the Superior Court of California in *Cal. Chaparral Inst. Et. al. v. Board of Forestry*, the 2019 CalVTP PEIR may not be used for CEQA compliance for proposed vegetation treatment in chaparral or coastal sage scrub, except in limited circumstances. In this instance, chaparral will be completely avoided and not treated, and no further evaluation is necessary.

Though various considerations go into management actions based on adaptive management cycles, broadly speaking, goals in forest and woodland ecosystem types include the removal of heavy surface fuels and ladder fuels in the understory. The focus is on the removal of dead trees, encroaching trees, and preventing recruitment of Douglas fir trees in the oak woodland understory. Priority will be placed on the recruitment and sprout recovery of overstory species including coast live oak, California black oak, Oregon white oak, and California blue oak. Allowing sprout recovery of California bay laurel, Pacific madrone, and Douglas fir seedlings will be selective and limited. The focus will be on preventing encroachment and heavy fuel build up in woodland understory and where encroached thinning from below and cutting trees and brush where it is acting as a ladder fuel to the tree canopy. Slash and cut debris will not be left or piled next to trees or under tree canopy whenever possible to avoid the buildup of ladder fuels and potential heat transfer adjacent to live trees. Fuel bed height of shall not exceed 24".

Goals for grassland vegetation types predominately include increasing biodiversity and favorable native species. This will be accomplished primarily through appropriately-timed use of prescribed fire or prescribed grazing to prevent Douglas fir and coyote brush encroachment, decrease the cover of invasive species, reduce thatch, and promote desirable native species.

Treatment Activities

The proposed treatment activities are prescribed burning, manual treatment, mechanical treatment, prescribed herbivory, and targeted application of herbicides. All of these treatments (described below) are consistent with the treatment activities described in the PEIR. Biomass would be disposed of by mastication, chipping, lop and scatter, and burning. Access to treatment areas would occur on pre-existing roads and trails. No vehicles would be permitted off pre-existing roads. Tracked equipment, such as masticators, would be limited to slopes under 30%. All vehicles and equipment from off-site will require cleaning to avoid spreading or introducing invasive species.

The primary treatment activities that will be used to meet these objectives are prescribed fire, prescribed herbivory, and manual treatment. However, mechanical treatment and herbicide may be used to help facilitate the above objectives if they are consistent with stewardship goals and are the most logistically viable. Treatment types and associated equipment and tools are specific to each ecosystem type (Table 2).

Project-Specific Analysis and Addendum

Table 2. Project Ecosystem and Treatment Types

Ecosystem type	Vegetation types		Total Acres	Treatment type	Equipment/Method	Maintenance Schedule
	NVCS	CWHRT				
Riparian	Southwestern North American Riparian Evergreen and Deciduous	Montane Riparian	7.59	Prescribed Burning (broadcast & pile), Mechanical Manual Targeted Herbicide	drip torches, propane torches, mobile water resources, masticators, chippers (tracked and wheeled), excavators, skid steer, tractors, bulldozers, hand tools, chainsaws, line-trimmer	5-15 years
	Southwestern North American Riparian/Wash (Scrub Group)*	Montane Riparian				
	Vancouverian Riparian Deciduous (Forest Group)*	Montane Riparian				
Wetland	Western North American Freshwater Marsh (Macrogroup)*	Fresh Emergent Wetland	1.29	Prescribed Burning (broadcast), Prescribed Herbivory Herbicide (hand application)	drip torches, propane torches, mobile water resources, masticators, hand tools, chainsaws, line-trimmer	2-8 years
Grassland	California Annual and Perennial Grassland (Macrogroup)	Annual Grassland, Perennial Grassland	833.37	Prescribed Burning (broadcast), Prescribed Herbivory Herbicide (hand application)	drip torches, propane torches, mobile water resources, masticators, hand tools, chainsaws, line-trimmer	2-8 years
	Allium falcifolium - Eriogonum spp. - Streptanthus spp. Provisional Alliance	Annual Grassland, Perennial Grassland				
	Rubus armeniacus Alliance	Valley foothill riparian				
Conifer Forest	<i>Pinus attenuate</i> Alliance	Closed-Cone Pine-Cypress	150			

Project-Specific Analysis and Addendum

	<i>Pseudotsuga menziesii</i> Alliance	Douglas Fir		Prescribed Burning (broadcast & pile), Mechanical Manual Targeted Herbicide	drip torches, propane torches, mobile water resources, masticators, chippers (tracked and wheeled), excavators, skid steer, tractors, bulldozers, hand tools, chainsaws, line-trimmer	5-15 years
Woodland	<i>Arbutus menziesii</i> Alliance	Coastal oak woodland	643.11	Prescribed Burning (broadcast & pile), Mechanical Manual Targeted Herbicide	drip torches, propane torches, mobile water resources, masticators, chippers (tracked and wheeled), excavators, skid steer, tractors, bulldozers, hand tools, chainsaws, line-trimmer	2-10 years
	<i>Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizeni)</i> Alliance	Montane Hardwood				
	<i>Quercus agrifolia</i> Alliance	Coastal Oak Woodland				
	<i>Quercus chrysolepis</i> Alliance	Montane Hardwood				
	<i>Quercus douglasii</i> Alliance	Blue Oak Woodland				
	<i>Quercus durata</i> Alliance	Mixed Chaparral				
	<i>Quercus garryana</i> Alliance	Montane hardwood				
	<i>Quercus kelloggii</i> Alliance	Montane hardwood				
	<i>Quercus lobata</i> Alliance	Valley Oak Woodland				
	<i>Quercus wislizeni (tree)</i> Alliance	Coastal Oak Woodland				
	<i>Umbellularia californica</i> Alliance	Coastal Oak Woodland				
	<i>Forest Sliver</i>	N/A				
	<i>Pinus sabiniana / Quercus durata</i> Provisional Alliance					

Project-Specific Analysis and Addendum

Chaparral			33.45	Prescribed Burning (broadcast), Mechanical Manual Targeted Herbicide	drip torches, propane torches, mobile water resources, masticators, chippers (tracked and wheeled), excavators, skid steer, tractors, bulldozers, hand tools, chainsaws, line-trimmer	30-120*
	<i>Adenostoma faciculatum</i> Alliance	Mixed Chaparral				
	<i>Arctostaphylos (canescens, manzanita, stanfordiana)</i> Provisional Alliance	Mixed Chaparral				
	<i>Ceanothus cuneatus</i> Alliance	Mixed Chaparral				
	<i>Eriodictyon californicum</i> - <i>Lupinus albifrons</i> Alliance	Mixed Chaparral				
Total			1,669			

Project-Specific Analysis and Addendum

Prescribed Burning

Prescribed burning may occur on up to 1,588 acres of the Preserve using pile burning and broadcast burning. Prescribed burning is the primary tool for maintenance where possible. The major limiting factors to prescribed broadcast burning are suitable containment lines and vehicle and water access.

Pile Burning

Pile burning will be heavily utilized in areas where surface and ladder fuels are too abundant to broadcast burn safely, where broadcast burning is not logistically feasible, or when the amount of surface fuels generated exceeds what lop and scatter techniques may accommodate. Fuel generated from mechanical or manual treatments would primarily be piled by hand, but in some cases, equipment like a skid steer, tractor, bulldozer, or excavator may be used.

Broadcast Burning

Broadcast burning would be used to reduce fuel loading, promote native flora, and maintain natural fire regimes in forests, woodland, savanna, and grasslands. Pre-burn treatment activities like manual thinning, mechanical thinning, or prescribed herbivory may occur to ensure ecological objectives or containment line needs are met. Further, to meet the containment needs required in the burn plan, a containment line may need to be constructed using a mow line or installing a hand line. Burns may occur any time of year given they can be permitted by CAL FIRE and the Bay Area Air Quality District. All operations will be in accordance with approved burn plans.

Cultural Burning

Cultural burning is the use of fire by cultural practitioners, Native America Tribes, tribal organizations. This is the intentional use of fire to achieve cultural goals and objectives ranging from subsistence to ceremonial activities as well as maintaining ecosystem health. Cultural burning is consistent with the goals of the Cal VTP, California's Strategic Plan for Expanding Beneficial Use of Fire, and AHE's stewardship goals.

Mechanical Treatment

Mechanical Treatment may occur on up to 400 acres of the Preserve. Equipment for treatments would include masticators, chippers, or excavators to reduce shrubs and small trees. Equipment will be limited to slopes that are less than 30 percent.

Manual Treatment

Manual Treatment may occur on up to 1,588 acres of the Preserve. Manual treatments would include thinning, pruning, and hand piling, or lopping and scattering fuels to reduce fuel loading. Equipment would include chainsaws, pole saws, and line trimmers.

Prescribed Herbivory

Prescribed herbivory may occur on up to 1,438 acres of the preserve. Prescribed herbivory treatments would use domestic livestock including cows, sheep, and/or goats to reduce the cover of a target species. This treatment would most likely be used in ecosystems with an herbaceous layer dominated by grassland species.

Herbicide Application

Project-Specific Analysis and Addendum

Herbicide application may occur on up to 935 acres of the Preserve. Herbicide treatments would target resprouting shrubs, trees, and invasive species that are not desirable to meet the ecosystem health objectives. Targeted ground-level spraying is the only type permitted. All herbicide application activities would comply with the US Environmental Protection Agency (EPA) label directions as well as California EPA and California Department of Pesticide Regulation label standards. All herbicide applications will be performed by a certified and licensed pesticide applicator. All herbicide application will be done by hand and focused.

Treatment Maintenance

Maintenance treatments would be under the same shaded fuel break and ecological restoration treatment type and use the same treatment activities (prescribed burning, manual, mechanical, prescribed herbivory, and herbicide). However, the broad goal is to use prescribed burning as the primary treatment type for maintenance where feasible. Maintenance treatments will vary from site to site based on regrowth and ecosystem differences, and operational limitations. Maintenance treatments are anticipated to occur every 3 to 10 years based on specific ecosystem needs.

Project Specific Analysis

VEGETATION TREATMENT PROJECT INFORMATION

1. **Project Title:** Modini Cal VTP
2. **Implementing Entity's Name and Address:** All Hands Ecology, 4900 Shoreline Hwy, Stinson Beach, CA 94970
3. **Contact Person Information and Phone Number for Implementing Entity:** Tom Gardali CEO, tom.gardali@egret.org, 415-342-8909
4. **Project Proponent Name and Address:**
Sonoma County Resource Conservation District
1221 Farmers Ln Ste F
Santa Rosa, Ca 95405
5. **Contact Person Information and Phone Number:** Jason Wells, Sonoma RCD Forester, (707) 569-1448
6. **Project Location:** Modini Preserve is located on Pine Flat Rd in Sonoma County. Coordinates of the Project Area are 38°42.348' N, 122°45.328' W.
5. **Total Area to be Treated (acres)** 1,621
6. **Description of Project:**

Initial Treatment

Initial treatment types include shaded fuel break and ecological restoration. Treatment activities include prescribed burning, manual, mechanical, prescribed herbivory, and herbicide application. See above project description for more details.

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

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

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 Initial Treatment]*

- ☒ Prescribed Burning (Broadcast), __1,588__ acres
- ☒ Prescribed Burning (Pile Burning) 1,588 acres
- ☒ Mechanical Treatment, __400__ acres
- ☒ Manual Treatment, __1,588__ acres
- ☒ Prescribed Herbivory, __1,438__ acres
- ☒ Herbicide Application, __200__ acres

Fuel Type *[see description in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in description of Initial Treatment]*

- ☒ Grass Fuel Type
- ☒ Shrub Fuel Type
- ☒ Tree Fuel Type

Project-Specific Analysis and Addendum

Treatment Maintenance

Maintenance Treatment types include shaded fuel break and ecological restoration. Treatment activities include prescribed burning, manual, mechanical, prescribed herbivory, and herbicide application. See above project description for more details.

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

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

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 Treatment Maintenance]*

- ☐ Prescribed Burning (Broadcast), __1,588__ acres
- ☐ Prescribed Burning (Pile Burning) 1,588 acres
- ☐ Mechanical Treatment, __400__ acres
- ☐ Manual Treatment, __1,588__ acres
- ☐ Prescribed Herbivory, 1,438 acres
- ☐ Herbicide Application, __200__ acres

Fuel Type *[see description in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in description of Treatment Maintenance]*

- ☒ Grass Fuel Type
- ☒ Shrub Fuel Type
- ☒ Tree Fuel Type

Use of the PSA for Treatment Maintenance

Proposed maintenance treatments include prescribed burning, mechanical, manual, prescribed herbivory, and herbicide application. Prior to implementing a maintenance treatment, the project proponent will verify that the expected site conditions as described in the PSA are present in the treatment area.

7. **Regional Setting and Surrounding Land Uses:** The project area is located in northern Sonoma County approximately 10 miles northeast of the town of Healdsburg in the Mayacamas Range in Mishewal Wappo ancestral territory. The preserve is owned and managed by All Hands Ecology, a non-profit conservation organization.

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

- Burn Permit obtained from CAL FIRE
- Smoke Management Plan from NoSoCo Air
- Pesticide application permit through the Sonoma County CAL Ag permit

Coastal Act Compliance

- ☒ The proposed project is NOT within the Coastal Zone

Project-Specific Analysis and Addendum

- ☐ 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

9. Native American Consultation.

Pursuant to CalVTP SPR CUL-2, Native American contacts obtained from the Native America Heritage Commission list were contacted via mail sent on 4/22/2024. They included letters to 35 individuals representing 25 different tribal entities including Big Valley Rancheria of Pomo Indians, Cahto Tribe, Cloverdale Rancheria of Pomo Indians, Coyote Valley Rancheria of Pomo Indians, Dry Creek Rancheria of Pomo Indians, Elem Indian Colony Pomo Tribe, Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Federated Indians of Graton Rancheria, Guideville Rancheria of California, Hopland Band of Pomo Indians, Kashia Band of Pomo Indians, Koi Nation of Northern California, Lytton Rancheria, Manchester Band of Pomo Indians, Middletown Rancheria of Pomo Indians, Mishewal-Wappo Tribe of Alexander Valley, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Redwood Valley or Little River Band of Pomo Indians, Robinson Rancheria of Pomo Indians, Round Valley Reservation/ Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, and Yokayo Tribe. Two responses were received. One from Kashia Band of Pomo Indians stating that this was not in their ancestral tribal territory. And one from Lytton Rancheria acknowledging receipt of the letter and confirming they did not request consultation. No other responses were received. However, based on the initial study and the recommendation from the NAHC, the Mishewal-Wappo Tribe of Alexander Valley has been identified as the tribal entity to continue to reach out to for consultation on specific projects associated with this PSA

Project-Specific Analysis and Addendum

10. Note Regarding Writ of Mandate Affecting Treatment of Chaparral and Coastal Sage Scrub

Pursuant to a decision made by the Superior Court of California in *Cal. Chaparral Inst. Et. al. v. Board of Forestry*, the 2019 CalVTP PEIR may not be used for CEQA compliance for proposed vegetation treatment in chaparral or coastal sage scrub, with certain exceptions for specific categories of treatment the Court found to be severable from the writ's prohibitions (i.e., treatment may not proceed in chaparral and coastal sage scrub except as provided in the specific, limited allowances). Those limited occurrences in which treatment may proceed in chaparral and coastal sage scrub habitats include:

1. **Limited-width, strategic fuel breaks.** New linear, accessible strategic fuel breaks located along ridgelines, roadsides, and in other critical defensive locations determined by responsible fire agencies, provided that long-term maintenance of flammable nonnative vegetation is included. Such fuel break treatments shall be the minimum width necessary to provide for firefighter safety, operational procedures, and back firing operations, and shall not exceed 300 feet in width.
2. **Maintenance of existing treatments.** Maintenance of existing fuel breaks and prior treatment areas to control flammable, non-native invasive plants.
3. **Wildland-Urban Interface (WUI) treatments.** WUI fuel reduction treatment located within 1,000 feet of the Interface layer mapped in the [CAL FIRE WUI layer \(WUI25_1\)](#), provided that long-term maintenance of flammable, non-native vegetation is included, with a preference for hand-thinning.
4. **Ecological Restoration treatments.** Ecological restoration treatments consisting of removal of flammable, non-native vegetation.
5. **Post-fire treatments.** Treatments where the stand of chaparral or coastal sage scrub has a state rarity rank of S4 (apparently secure) or S5 (demonstrably secure) according to CDFW (<https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#lists>), and has generated following a fire within the last 15 years in an area previously characterized by woodland or forest before the fire, as evidenced by satellite imagery and as defined in accordance with the Key to Main Vegetation Categories in the *CNPS Manual of California Vegetation*.

The project proponent will not approve or implement projects within chaparral or coastal sage scrub habitat types, other than those outlined above, until the writ of mandate has been discharged.

DETERMINATION (To be completed by the project proponent)

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

- ☒ I find that all of the effects of the proposed project (a) have been covered in the CalVTP PEIR, and (b) all applicable Standard Project Requirements and mitigation measures identified in the CalVTP PEIR will be implemented. The proposed project is, therefore, **WITHIN THE SCOPE** of the CalVTP PEIR. **NO ADDITIONAL CEQA DOCUMENTATION** is required.
- ☒ I find that treatments in proposed project areas outside the CalVTP treatable landscape do not result in substantial changes in the project, no substantial changes in circumstances have occurred, and no new information of substantial importance has been identified. The inclusion of project areas outside the CalVTP treatable landscape will not result in any new or substantially more severe significant impacts. None of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred; therefore, this **ADDENDUM** is adopted to address the project areas outside geographic extent presented in the PEIR.
- ☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR. These effects are less than significant without any mitigation beyond what is already required pursuant to the CalVTP PEIR. A **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR or will have effects that are substantially more severe than those covered in the CalVTP PEIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP PEIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent that would avoid or reduce the effects so that clearly no significant effects would occur. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project will have significant environmental effects that are (a) new and were not covered in the CalVTP PEIR and/or (b) substantially more severe than those covered in the CalVTP PEIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Signature

Date

Printed Name

Title

Agency

Project-Specific Analysis and Addendum

Aesthetics and Visual Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	LTS	Impact AES-1, pp. 3.2-16 – 3.2-19	No	None	NA	None	NA	NA
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	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	No	None	NA	None	NA	NA
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	SU	Impact AES-3, pp. 3.2-25 – 3.2-27	No	None	NA	None	NA	NA

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

New Aesthetic and Visual Resource Impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP PEIR?		☐ Yes	☒ No	If yes, complete row(s) below and discussion
		Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]		☐	☐	☐

Project-Specific Analysis and Addendum

Discussion

Impact AES-1

The project area is not within view of a public scenic vista or Scenic Hwy.

Impact AES-2

The project area is not within view of a public scenic vista or Scenic Hwy.

Impact AES-3

The project area is not within view of a public scenic vista or Scenic Hwy.

New Aesthetic and Visual Resource Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Agriculture and Forestry Resources

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

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

New Agriculture and Forestry Resource Impacts: Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[Identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact AG-1

Initial and Maintenance treatments are focused on fuels and vegetation management to create a healthier forest that is more resilient to wildfire, specifically more resistant to stand replacing wildfires. Many vegetation types are present within the project area (including non-forest types) with many different stewardship needs. However, in forest vegetation types, the general focus will be on removing excessive surface fuels, select shrub, and small trees (typically <24" DBH) to favor and protect larger trees for a more "old growth" structure. Select small trees, seedlings, saplings will be left to ensure there is not a future type conversion. However, small areas of knobcone pine forest type that is encroaching on historic grassland and/or oak woodland may be removed.

New Agriculture and Forestry Resource Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Air Quality

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	PSU	Table 3.4-1; Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AD-4, AQ-1 through AQ-4	AQ-1	PSU	No	Yes
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	Table 3.4-6; Impact AQ-2 pp. 3.4-33 – 3.4-34; Appendix AQ-1	Yes	HAZ-1, NOI-4 NOI-5	NA	LTS	No	Yes
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	LTS	Section 3.4.2; Impact AQ-3, pp. 3.4-34 – 3.4-35	Yes	AQ-4 AQ-5	NA	LTS	No	Yes
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	PSU	Section 3.4.2; Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AD-4 AQ-2 AQ-3,	NA	PSU	No	Yes
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	LTS	Impact AQ-5, pp. 3.4-37 – 3.4-38	Yes	HAZ-1 NOI-4 NOI-5	NA	LTS	No	Yes
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	PSU	Section 2.5.2; Impact AQ-6; pp. 3.4-38	Yes	AD-4 AQ-2 AQ-3	NA	PSU	No	Yes

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

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Project-Specific Analysis and Addendum

Discussion

Impact AQ-1

The proposed treatments and logistical requirements to implement them would result in impacts to emissions of criteria air pollutants and precursors generated that could exceed CAAQS or NAAQS and conflict with Regional Air Quality Plans resulting in potentially significant impacts. The impacts of the proposed treatments are within the scope analyzed in the PEIR. These impacts will be reduced by implementing SPR's AD-4, AQ-1 through 4, and mitigation measure AQ-1 where possible. The implementation of AQ-1 is limited by lack of appropriate and effective technology to replace Diesel engines with electric. While implementation of these measures may reduce impacts they are potentially significant and unavoidable.

Impact AQ-2

Use of vehicles and mechanical equipment associated with some of the proposed treatments could expose people to diesel particulate matter emissions. Proposed treatment activities and their associated impacts are within the scope of analyzed impacts in the PEIR. These potential impacts will be reduced by implementing SPR's HAZ-1, NOI-4, and NOI-5. These impacts are less than significant.

Impact AQ-3

Ultramafic soils are present with the Project Area that has the potential to contain naturally occurring asbestos (NOA). Proposed treatment activities and their associated impacts are within the scope of the analyzed impacts in the PEIR. These potential impacts will be reduced by implementing SPR's AQ-4 and AQ-5. These impacts are less than significant.

Impact AQ-4

Prescribed fire treatments as proposed could expose people to toxic air contaminants at levels that are potentially significant. The impacts of proposed prescribed fire treatments are within the scope analyzed in the PEIR. These impacts will be reduced by implementing SPR's AD-4, AQ-2, AQ-3. While implementation of these measures may reduce impacts, they are potentially significant and unavoidable.

Impact AQ-5

The use of diesel equipment associated with some proposed treatments could expose people to objectionable odors from diesel exhaust. The proposed treatment activities and their associated impacts are within the scope analyzed in the PEIR. While some proposed treatment activities may have the above impacts, excessive levels of diesel exhaust is not anticipated, and would not likely impact a substantial number of people. However, impacts will be addressed reduced by implementing SPR's HAZ-1, NOI-4, NOI-5. This impact is less-than-significant.

Impact AQ-6

Proposed prescribed fire treatments could expose people to objectionable odors and have a potentially significant impact. The proposed activities and their associated potential impacts are within the scope of the PEIR. SPR's AD-4, AQ-2, and AQ-3 will be implemented to reduce potential impacts. While implementation of these SPR's would greatly reduce the likelihood of exposing people to objectionable odors from prescribed fire, there is no guarantee the issue would be fully mitigated. This impact is potentially significant and unavoidable.

New Air Quality Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Archaeological, Historical, and Tribal Cultural Resources

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

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

New Archaeological, Historical, and Tribal Cultural Resource Impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

ALTA consulting conducted an initial study of the project area including a records search through the California Historical Resource Information System, other background research, and recommended outreach to California Native American tribes identified by Native American Heritage Commission in compliance with Assembly Bill 52.

Results of this initial study are in Attachment D. This report contains site specific findings and protection measures and is maintained as confidential.

The records search and other background research yielded result including: No California Historical Landmarks or Points of Interest are present in project area, 23 cultural resource studies have been preformed within a quarter mile

Project-Specific Analysis and Addendum

radius of the project area, 20 studies within the Project Area, almost the entire Project Area has been surveyed, 25 cultural resources documented with a quarter mile radius of the Project Area, and 20 cultural resources documented within the Project Area.

ALTA reached out to the Native American Heritage Commission (NAHC) on April 22, 2024 requesting a review of the Sacred Lands File. On April 23, 2024 the NAHC responded that the search of the Sacred Lands filed has a positive finding and provided a list of suggested tribal entities to contact. NAHC recommended contacting the Mishewal-Wappo Tribe of Alexander Valley. ALTA reached out to 25 different tribal entities consistent with CUL-2. Two responses were received. One from Kashia Pomo stating that this was not in their ancestral tribal territory. And one from Lytton Rancheria acknowledging receipt of the letter and confirming they did not request consultation. No other responses were received. However, based on the initial study and the recommendation from the NAHC, the Mishewal-Wappo Tribe of Alexander Valley has been identified as the tribal entity to continue to reach out to for consultation on specific projects associated with this PSA.

Impact CUL-1

Proposed treatment and maintenance activities have the potential to impact historical resources. These potential impacts have been assessed in the PEIR and implementation of SPR's AD-2, AD-3, CUL-1, CUL-3 CUL-7, CUL-8, TCR-1, TCR-2, TCR-3, and TCR-4` would result in impacts being less than significant. The proposed treatment activities are within the scope of the PEIR and would have less than significant impacts.

Impact CUL-2

Proposed treatment and maintenance activities include mechanical treatments that could cause ground disturbance and thus have a potential to cause damage to known and unknown archaeological resources. Twenty archaeological resources were identified within the project area as a result of the ALTA records search. These sites will be considered historical resources under CEQA. Implementation of SPRs AD-2, AD-3, Cul-1-5, and CUL-8 will result in potential impacts being less than significant. Results of these efforts are kept in a confidential document. Any archaeological resource discovered during treatment implementation will be given a 100ft buffer and assessed by an archaeologist as stated in Mitigation Measure CUL-2.

Impact CUL-3

Native American contacts for this project were obtained from the NAHC. It has been determined that FIGIR is the only federally recognized tribe that is culturally affiliated with the Preserve. Based on the analysis of this impact in the PEIR, inclusion of SPR AD-2, AD-3 CUL-1 through SPR CUL-8, TCR-1, TCR-2, TCR-3, TCR-4, TCR-5, and TCR-6 the impact will be less than significant.

Impact CUL-4

Proposed treatment and maintenance activities could include mechanical treatments that could cause ground disturbance and could uncover human remains. The proposed treatment activities and their potential impact are consistent with those analyzed in the PEIR. SPs that apply to this potential impact include AD-2, AD-3, TCR-1, TCR-2, TCR-3, and TCR-4.

New Archaeological, Historical, and Tribal Cultural Resource Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

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Biological Resources

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTSM	Impact BIO-1, pp 3.6-131–3.6.138	Yes	BIO-1 BIO-2 BIO-6 BIO-7 BIO-9 GEO-1 through GEO-7	BIO-1a BIO-1b BIO-1c	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTS (all wildlife species except bumble bees) S&U (bumble bees)	Impact BIO-2, pp 3.6-139–3.6.184	Yes	BIO-1 through BIO-4 BIO-9 through BIO-12 GEO-1 GEO-2 HYD-4	BIO-2a BIO-2b BIO-2c BIO-5	LTSM	No	Yes
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	LTSM	Impact BIO-3, pp 3.6-186–3.6.191	Yes	BIO-1 through BIO-6 BIO-9 GEO-1 GEO-3 through GEO-7 HAZ-1 HAZ-5 HAZ-6 HYD-4 HYD-5	BIO-3a BIO-3b	LTSM	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTS	Impact BIO-3, pp 3.6-186–3.6.191	No	NA	NA	NA	NA	NA
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTS	Impact BIO-4, pp 3.6-191–3.6.192	No	BIO-1 BIO-2 BIO-4 BIO-10 HYD-4	None	LTS	No	Yes

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Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197-3.6-198	No	BIO-1 BIO-2 BIO-10 BIO-11 BIO-12	NA	LTS	No	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	No Impact	Impact BIO-7, pp 3.6-198-3.6-199	Yes	AD-3	NA	No Impact	No	Yes
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	No Impact	Impact BIO-8, pp 3.6-199-3.6-200	No	-	NA	-	-	-

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

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?		☐ Yes	☒ No	If yes, complete row(s) below and discussion
		Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]		☐	☐	☐

Discussion

Data Review

Pursuant to SPR BIO-1, Nomad biologist conducted a data review of project specific biological resources, including habitat and vegetation types, and special-status plants, special-status wildlife, and sensitive natural communities with potential to occur in the treatment areas. Vegetation communities present in the treatment areas were identified using the Sonoma County Fine Scale Vegetation and Habitat Map (SCVMLP 2019) and were adjusted as necessary based on data collected during field reconnaissance. The treatment areas occupy a total of 1,620 acres comprised of non-native grassland, serpentine chaparral, coastal and valley freshwater marsh, chamise chaparral, northern mixed chaparral, leather oak chaparral, southwestern Noarth American riparian/wash scrub group, madrone forest, knobcone pine forest, serpentine gray pine-chaparral woodland, Douglas fir forest, oak woodland, coast live oak woodland, canyon live oak woodland, blue oak woodland, Oregon white oak woodland, black oak woodland, valley oak woodland, interior live oak woodland, southwestern North American riparian (evergreen and deciduous), California bay forest, and Vancouverian riparian deciduous forest group (Table 3.7-1).

Table 3.7-1. List of Vegetation Communities in the Modini Preserve

LAND COVER TYPE	Vegetation Community
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<u>Upland Herbaceous Vegetation Types</u>	
Non-native grassland	California Annual and Perennial Grassland
Serpentine chaparral	<i>Allium falcifolium</i> – <i>Eriogonum</i> spp. – <i>Streptanthus</i> spp. Provisional Alliance
<u>Wetland Herbaceous Dominated Vegetation Types</u>	
Coastal and Valley Freshwater Marsh	Not Described
<u>Shrub Dominated Vegetation Types</u>	
Chamise chaparral	<i>Adenostoma fasciculatum</i> Alliance <i>Eriodictyon californicum</i> – <i>Lupinus albifrons</i> Alliance
Northern mixed chaparral	<i>Arctostaphylos (canascens, manzanita, stanfordiana)</i> <i>A. glandulosa</i> Alliance <i>Ceanothus cuneatus</i> Alliance
Leather oak chaparral	<i>Quercus durata</i> Alliance
Southwestern North American Riparian/Wash Scrub Group	Not Described
<u>Woodland and Forest Vegetation Types</u>	
Madrone forest	<i>Arbutus menziesii</i> Alliance
Knobcone pine forest	<i>Pinus attenuata</i> Alliance
Serpentine foothill pine-chaparral woodland	<i>Pinus sabiniana</i> / <i>Quercus durata</i> Provisional Alliance
Douglas fir forest & woodland	<i>Pseudotsuga menziesii</i> Forest & Woodland Alliance
Oak woodland	<i>Quercus (agrifolia, douglasii, garryana, kelloggii, lobata, wislizenii)</i> Alliance
Coast live oak woodland and forest	<i>Quercus agrifolia</i> Alliance
Canyon live oak woodland	<i>Quercus chrysolepis</i> Alliance
Blue oak woodland	<i>Quercus douglasii</i> Alliance
Oregon white oak woodland	<i>Quercus garryana</i> Alliance
Black oak woodland	<i>Quercus kelloggii</i> Alliance
Valley oak woodland	<i>Quercus lobata</i> Alliance
Interior live oak woodland	<i>Quercus wislizeni</i> (tree) Alliance
Southwestern North American Riparian Evergreen and Deciduous	Not Described
California bay forest	<i>Umbellularia californica</i> Alliance
Vancouverian Riparian Deciduous Forest Group	Not Described

Background information for listed and special status plant and wildlife species, and sensitive natural communities was compiled through a review of the following resources:

U.S. FISH AND WILDLIFE SERVICE (USFWS):

- National Wetland Inventory for the Jim Town and Mount St. Helena Quadrangles (USFWS 2024a)

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- Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the Northern Spotted Owl (USFWS 2024b)
- Federal Endangered and Threatened Species that Occur in or may be Affected by the Project (USFWS 2024c)

NATIONAL OCEANOGRAPHIC AND ATMOSPHERIC ADMINISTRATION FISHERIES (NOAA FISHERIES):

- Endangered and Threatened Species; Establishment of Species of Concern List, Addition of Species to Species of Concern List, Description of Factors for Identifying Species of Concern, and Revision of Candidate Species List Under the Endangered Species Act (NOAA 2004)
- Endangered and Threatened Species; Revision of Species of Concern List, Candidate Species Definition, and Candidate Species List (NOAA 2006)
- Protected Resources App (NOAA 2024)

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW):

- California Natural Communities List (CDFW 2023)
- California Natural Diversity Database (CNDDDB) Query for the Asti, The Geysers, Whispering Pines, Geyserville, Jimtown, Mount St. Helena, Guerneville, Healdsburg, and Mark West Springs 7.5-minute USGS quadrangles (CDFW 2024a)
- Special Animal List (CDFW 2024b)
- Special Vascular Plants, Bryophytes, Lichens List (CDFW 2024c)
- Spotted Owl Observations Database (CDFW 2024d)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2024e)
- State and Federally Listed Endangered, Threatened and Rare Plants of California (CDFW 2024f)
- Terrestrial Connectivity Data and Resources (CDFW 2019)

OTHER SOURCES:

- A Manual of California Vegetation (Sawyer et al. 2009)
- The California Native Plant Society's *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2024)
- Consortium of California Herbaria One (CCH1) (CCH1 2023)
- Consortium of California Herbaria Two (CCH2) (CCH2 2023)
- The Jepson eFlora (JFP 2024)
- The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012)
- Appendix BIO-3 (Table 9a, Table 9b, and Table 19) in the PEIR (Volume II) for special-status plants and wildlife that could occur in the Northern California Coast ecoregion
- Section 3.6 Biological Resources (Table 3.6-16) in the PEIR (Volume II) for Vegetation and Habitat Types within the Treatable Landscape for the Northern California Coast Ecological Section

Botanical taxonomy and nomenclature conforms to *The Jepson Manual* (Baldwin et al. 2012) with the exception of recent updates posted on the *Jepson eFlora* (JFP 2024) website. Common names of plant species are derived from the *Calflora Database* (Calflora 2023). Vegetation descriptions conform to the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), and *A Manual of California Vegetation* (Sawyer et al. 2009); wetland and deepwater habitat classifications conform to *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979), where appropriate.

Taxonomy and nomenclature for special status plant species conform to the *Inventory of Rare and Endangered Plants of California* (CNPS 2024) and *Special Vascular Plants, Bryophytes and Lichens List* (CDFW 2024c). Nomenclature for

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common and special status wildlife conforms to the Complete List of Amphibian, Reptile, Bird and Mammal Species in California (CDFW 2016) with taxonomic nomenclature updates conforming to the Special Animals List (CDFW 2024b).

Personnel and Field Investigation

Nomad senior botanist Shannon Still and Nomad wildlife biologists Dana Terry and Jared Flint conducted reconnaissance-level site visits of the treatment areas on April 6 and April 7, 2023. While completing that task, Nomad personnel documented the biological resources present in the treatment area. Those efforts included searching for plants and animals while walking throughout the treatment area and making observations from stationary observation points.

A portion of proposed impact areas and areas representative of all vegetation communities within the treatment areas were visited and evaluated for their potential to support sensitive biological resources. Protocol-level surveys for special status plants and animals were not conducted as part of this assessment. However, all plant species in bloom or otherwise recognizable during the site visit were identified to a level necessary to determine their regulatory status. In addition, all wildlife species observed or recognized by diagnostic sign (e.g., audible call, tracks, scat, carcasses, burrows) were identified and recorded.

Assessment and Findings

A complete list of special-status species known to occur in the vicinity¹ of treatment areas and considered as part of this assessment, their regulatory status, habitat requirements, local distribution, and potential for occurrence are listed in Attachment B. Following implementation of SPR BIO-1, including review of relevant literature, knowledge of regional biota, and observations made during field investigations, a total of 80 special-status plants (including six species known to occur in the treatment areas) and 24 special-status animals (including 4 species known to occur in the treatment areas) were determined to have the potential to occur in the treatment areas (Table 3.7-1).

Two special status plant species, Sonoma sunshine (*Blennosperma bakeri*) and Lake County stonecrop (*Sedella leiocarpa*), are federally and state listed as endangered. Two special status plant species, Clara Hunt's milk-vetch (*Astragalus claranus*) and Sebastopol meadowfoam (*Limnanthes vinculans*), are federally listed as endangered and state listed as threatened. Two special status plant species, Lake County western flax (*Hesperolinon didymocarpum*) and Geysers panicum (*Panicum acuminatum* var. *thermale*), are state listed as endangered. All of the special-status plants have California Rare Plant Ranks, including the following six species detected within the treatment areas: Brewer's milk-vetch (*Astragalus breweri*), Mt. Saint Helena morning-glory (*Calystegia collina* ssp. *oxyphylla*), serpentine cryptantha (*Cryptantha dissita*), Greene's narrow-leaved daisy (*Erigeron greenii*), Freed's jewelflower (*Streptanthus glandulosus* ssp. *fremontii*), Hoffman's bristly jewelflower (*Streptanthus glandulosus* ssp. *hoffmanii*).

One special status wildlife species, coho salmon – central California coast ESU (*Oncorhynchus kisutch* pop. 4) is federally and state listed as endangered. One species, steelhead – central California coast DPS (*Oncorhynchus mykiss irideus* pop. 8), is federally listed as threatened, and one species, California red-legged frog (*Rana draytonii*), is federally listed as threatened and state listed as a California Species of Special Concern (SSC). Four species, golden eagle (*Aquila chrysaetos*), white-tailed kite (*Elanus leucurus*), American peregrine falcon (*Falco peregrinus anatum*), and northern California ringtail (*Bassariscus astutus raptor*) are state listed as fully protected. Eleven species are listed as SSCs: northern coastal roach (*Hesperoleucus venustus navarroensis*), Russian River tule perch (*Hysteroecarpus traskii*), hardhead (*Mylopharodon conocephalus*), California giant salamander (*Dicamptodon ensatus*), foothill yellow-legged frog northwestern/north coast DPS (*Rana boylei*), red-bellied newt (*Taricha rivularis*), purple martin (*Progne subis*), pallid bat (*Antrozous pallidas*), western red bat (*Lasiurus blossevillei*), fisher (*Pekania pennanti*), and American badger (*Taxidea taxus*). Northwestern pond turtle (*Emys marmorata*) is also listed as an SSC in addition to being a candidate species to be federally listed as threatened. One species, sharp-shinned hawk (*Accipiter striatus*) is on the CDFW watch list. Four species are California Special Animals: North American porcupine (*Erethizon dorsatum*), hoary bat (*Lasiurus cinereus*), long-eared myotis (*Myotis evotis*), and fringed myotis (*Myotis thysanodes*). The three following

¹ Vicinity is defined as the area within the Asti, The Geysers, Whispering Pines, Geyserville, Jimtown, Mount St. Helena, Guerneville, Healdsburg, and Mark West Springs USGS 7 ½ Minute Quadrangles.

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species have been observed within the treatment areas: northwestern pond turtle, foothill yellow-legged frog – northwestern/north coast DPS, red-bellied newt, and ringtail.

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Table 3.7-2. Special Status Plants Present or Potentially Occurring in the Treatment Areas

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
FEDERAL/STATE ENDANGERED OR THREATENED AND CALIFORNIA RARE PLANT RANK SPECIES					
<i>Astragalus claranus</i> Clara Hunt's milk-vetch	Fed: FE CA: ST CEQA: 1B.1	Occurs on clay, rocky, serpentine (sometimes), and volcanic (sometimes) soils in chaparral (openings), cismontane woodland, and valley and foothill grassland at elevations between 75 and 275 meters. Known from NAP and SON counties.	March-May annual herb	Suitable vegetation associations and soil are present in the treatment areas. The nearest CNDDDB occurrence is a specific, extirpated occurrence (EONDX #6731) approximately 14 miles south-southeast of the property.	Possible
<i>Blennosperma bakeri</i> Sonoma sunshine	Fed: FE CA: SE CEQA: 1B.1	Occurs in mesic valley and foothill grassland and vernal pools at elevations between 10 and 110 meters. Known from MEN and SON counties.	March-May annual herb	Suitable vegetation associations (valley and foothill grassland) are present in the treatment areas.	Possible
<i>Hesperolinon didymocarpum</i> Lake County western flax	Fed: None CA: SE CEQA: 1B.2	Occurs in chaparral, cismontane woodland, valley and foothill grassland on serpentine substrates at elevations between 330 and 365 meters. Known from fewer than 10 occurrences in the Big Canyon area in LAK county.	May-July annual herb	Suitable vegetation association is present in the treatment areas, but the nearest CNDDDB occurrence (EONDX #13806) is approximately 7.6 miles northeast.	Possible
<i>Limnanthes vincularis</i> Sebastopol meadowfoam	Fed: FE CA: ST CEQA: 1B.1	Occurs in meadows and seeps, valley and foothill grassland, and vernal pools at elevations between 15 and 305 meters. Known from NAP and SON counties. May be introduced in NAP county.	April-May annual herb	Suitable vegetation associations (seeps and grassland) are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #2454) is approximately 4.95 miles south-southeast.	Possible
<i>Panicum acuminatum</i> var. <i>thermale</i> Geysers panicum	Fed: None CA: SE CEQA: 1B.2	Occurs in geothermally altered soil in closed-cone coniferous forest, riparian forest, and valley and foothill woodland, sometimes near streams at elevations between 305 and 2,470 meters. Known only from The Geysers and Lassen Volcanic NP areas in LAK, PLU, SHA, SON, and TEH counties. Plants in FRE county need verification.	June-August annual/perennial herb	Suitable vegetation associations are present in the treatment areas. The nearest CNDDDB occurrence (EONDX #4553) is approximately 2.5 miles north of the treatment areas.	Possible

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SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Sedella leiocarpa</i> Lake County stonecrop	Fed: FE CA: SE CEQA: 1B.1	Occurs in vernal mesic depressions of volcanic outcrops in cismontane woodland, valley and foothill grassland, and vernal pools at elevation between 365 and 790 meters. Known from LAK county.	April-May annual herb	Suitable vegetation associations (volcanic outcrops) are present in the treatment areas. The nearest CNDDDB occurrence (EONDX #4505) is approximately 5.2 miles north of the treatment areas.	Possible
CALIFORNIA RARE PLANT RANK SPECIES					
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	Fed: None CA: None CEQA: 1B.2	Occurs in broadleaved upland forest openings, chaparral, and cismontane woodland at elevations between 50 and 2,000 meters. Known from LAK, MRN, NAP, and SON counties.	April-July perennial deciduous shrub	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #98074) is approximately 6.2 miles south of the treatment areas.	Possible
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	Fed: None CA: None CEQA: 1B.2	Occurs in cismontane woodland, coastal bluff scrub, and valley and foothill grassland at elevations between 3 and 500 meters. Known from ALA, CCA, COL, LAK, MRN, NAP, SCL, SCR, SFO, SMT, SON, SUT, and YOL counties. May occur in SHA and SIS counties.	March-June annual herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #49052) is approximately 8.9 miles east of the treatment areas.	Possible
<i>Antirrhinum subcordatum</i> dimorphic snapdragon	Fed: None CA: None CEQA: 4.3	Occurs on serpentine (sometimes) substrates in chaparral and lower montane coniferous forest at elevations between 185 and 800 meters. Known from COL, GLE, LAK, and TEH counties.	April-July annual herb	Suitable vegetation and soil associations (serpentine) are present in the treatment areas. But the nearest herbarium record (Rattan s.n., from 1884) is from Stony Creek in Colusa County.	Possible
<i>Antirrhinum virga</i> twig-like snapdragon	Fed: None CA: None CEQA: 4.3	Occurs on rocky, often serpentine soils in openings of chaparral and lower montane coniferous forest at elevations between 100 and 2,015 meters. Known from LAK, NAP, SON, and YOL counties.	June-July perennial herb	Suitable vegetation and soil associations (serpentine) are present in the treatment areas. The nearest herbarium record (Neilson 2833, from 1974) is approximately 3.3 miles northeast of the treatment areas.	Possible

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SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Arctostaphylos manzanita</i> subsp. <i>elegans</i> Konocti manzanita	Fed: None CA: None CEQA: 1B.3	Occurs on volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forest at elevations between 395 and 1615 meters. Known from COL, GLE, HUM, LAK, MEN, NAP, SHA, SON, TEH, and TRI counties.	(January) March-May (July) perennial evergreen shrub	Suitable vegetation associations are present in the treatment areas. The nearest CNDDDB occurrence (EONDX #97471) is approximately 5.4 miles east-northeast of the treatment areas.	Possible
<i>Arctostaphylos stanfordiana</i> subsp. <i>riachei</i> Raiche's manzanita	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, often (serpentine) substrates in chaparral and openings in lower montane coniferous forest at elevations between 450 and 1,035 meters. Known from LAK and MEN counties.	February-April perennial evergreen shrub	Suitable vegetation associations and serpentine substrates are present in the treatment areas. The nearest CNDDDB occurrence (EONDX #98346) is approximately 8.5 miles east-northeast of the treatment areas.	Possible
<i>Asclepias solanoana</i> serpentine milkweed	Fed: None CA: None CEQA: 4.2	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest on serpentine substrates at elevations between 230 and 1,860 meters. Known from COL, GLE, LAK, MEN, NAP, SHA, SON, THE, and TRI counties.	May-July (August) perennial herb	Suitable vegetation associations and soil (serpentine) are present in the treatment areas. The nearest herbarium record (Neilson 3967, from 1978) is a collection from approximately 1.5 miles north of the treatment areas.	Possible
<i>Astragalus breweri</i> Brewer's milk-vetch	Fed: None CA: None CEQA: 4.2	Occurs on serpentine and volcanic soils in chaparral, cismontane woodland, meadows and seeps, and gravelly openings in valley and foothill grassland at elevations between 90 and 730 meters. Known from COL, LAK, MEN, MRN, NAP, and SON counties.	April-June annual herb	Suitable vegetation associations and soil (serpentine) are present in the treatment areas. The nearest specific herbarium record is a 1975 collection (Dryden 149) located approximately 7.5 miles northeast.	Present
<i>Astragalus clevelandii</i> Cleveland's milk-vetch	Fed: None CA: None CEQA: 4.3	Occurs in serpentine seeps within chaparral, cismontane woodland, and riparian forest at elevations between 200 and 150 meters. Known from COL, LAK, NAP, SON, TEH, and YOL counties.	June-September perennial herb	Suitable vegetation associations and soil (serpentine seeps) are present in the treatment areas. The nearest herbarium record (Hoover 5906, from 1942) is approximately 5.6 miles southeast on Mt. St. Helena.	Possible

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SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Astragalus rattanii</i> var. <i>jepsonianus</i> Jepson's milk-vetch	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, cismontane woodland, valley and foothill grassland often on serpentine soils at elevations between 295 and 700 meters. Known from COL, GLE, LAK, NAP, SBT, SON, TEH, and YOL counties.	March-June annual herb	Suitable vegetation and soil association (serpentine) are present in the treatment areas. The nearest CNDDDB occurrence (EONDX #94189) is approximately 5 miles east of the treatment areas.	Possible
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	Fed: None CA: None CEQA: 1B.2	Occurs on volcanic soils in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland at elevations between 110 and 915 meters. Known from LAK, NAP, and SON counties.	May-July perennial bulbiferous herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #47365) is a historic non-specific occurrence approximately 5 miles east of the treatment areas.	Possible
<i>Calamagrostis ophitidis</i> serpentine reed grass	Fed: None CA: None CEQA: 4.3	Occurs in lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and chaparral, openings and often north-facing slopes,	April-July perennial herb	Suitable vegetation associations (seeps and grasslands) are present in the treatment areas. There is a non-specific herbarium collection from 1948 (Tofsrud s.n.) recorded along Pine Flat Rd. which runs along and through Modini.	Possible
<i>Calandrinia breweri</i> Brewer's calandrinia	Fed: None CA: None CEQA: 4.2	Occurs within chaparral and coastal scrub in burned areas, disturbed areas, sometimes on loam and sandy substrates.	(January) March-June annual herb	Suitable vegetation associations and soil are present in the treatment areas. The nearest herbarium collection (de Nevers 13975, from 2018) is within 10 miles south of the treatment areas at Pepperwood Preserve. This species is a fire follower and the most recent fire within the treatment areas was the Kincaid Fire in 2019.	Possible

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SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Calochortus uniflorus</i> pink star-tulip	Fed: None CA: None CEQA: 4.2	Occurs in coastal prairie, coastal scrub, meadows and seeps, and North Coast coniferous forest at elevations between 10 and 1070 meters. Known from COL, LAK, MNT, MRN, NAP, SCR, SMT, and SON counties.	April-June perennial bulbiferous herb	Suitable vegetation associations are present in the treatment areas. The nearest herbarium collection (Wolf 1897, from 1928) is approximately 6.2 miles east of the treatment areas.	Possible
<i>Calyptridium quadripetalum</i> four-petaled pussypaws	Fed: None CA: None CEQA: 4.3	Occurs in chaparral and lower montane coniferous forest, usually on serpentine and sometimes on gravelly or sandy substrates, at elevations between 315 and 2,040 meters. Known from COL, LAK, MEN, NAP, SON, and TEH counties.	April-June annual herb	Suitable vegetation associations and soil are present in the treatment areas, and nearest herbarium record (LaPré s.n., from 1986) is approximately 1.94 miles north of the treatment areas.	Possible
<i>Calystegia collina</i> subsp. <i>oxyphylla</i> Mt. Saint Helena morning-glory	Fed: None CA: None CEQA: 4.2	Occurs on serpentine soils in chaparral, lower montane coniferous forest, and valley and foothill grassland at elevations between 279 and 1010 meters. Known from COL, LAK, MEN, MRN, NAP, SBT, and SON counties.	April-June perennial rhizomatous herb	Suitable vegetation associations are present. This species is recorded as occurring on the property (EONDX #12306), last updated in 2007.	Present
<i>Calystegia collina</i> subsp. <i>tridactylosa</i> three-fingered morning-glory	Fed: None CA: None CEQA: 1B.2	Occurs in openings in chaparral and cismontane woodland on gravelly, rocky, serpentine substrates at elevations between 0 and 600 meters. Known from MEN, LAK, and COL counties.	April-June perennial rhizomatous herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #114536) is approximately 7.75 miles north of the treatment areas.	Possible
<i>Carex praticola</i> northern meadow sedge	Fed: None CA: None CEQA: 2B.2	Occurs in mesic meadows and seeps at elevations below 3,200 meters. Known from DNT, HUM, LAK, MRN, MNO, SIS, TEH, TRI, and TUO counties.	May-July perennial herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #99856) is approximately 6.2 miles northeast of the treatment areas.	Possible

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<i>Castilleja ambigua</i> var. <i>ambigua</i> johnny-nip	Fed: None CA: None CEQA: 4.2	Occurs in coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, and vernal pool margins at elevations between 0 and 435 meters. Known from ALA, CCA, DNT, HUM, MEN, MRN, NAP, SCR, SMT, SOL, and SON counties.	March-August annual herb (hemiparasitic)	Suitable vegetation association (grassland) is present in the treatment areas. There is a non-specific herbarium collection from 1971 (Chuang, Heckard, Bacigalupi, and Rubtsoff 6897) collected approximately 16 miles south.	Possible
<i>Castilleja rubicundula</i> var. <i>rubicundula</i> pink creamsacs	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral openings, cismontane woodland, meadows and seeps, and valley and foothill grassland at elevations between 20 and 910 meters. Known from BUT, COL, GLE, LAK, NAP, SCL, SHA, and YOL counties.	April-June annual herb (hemiparasitic)	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #114529) is approximately 8.6 miles east of the treatment areas.	Possible
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	Fed: None CA: None CEQA: 1B.1	Occurs on serpentine (sometimes) and on volcanic (sometimes) soils in chaparral, cismontane woodland, and closed-cone coniferous forest at elevations between 75 and 1065 meters. Known from LAK, MEN, NAP, and SON counties.	February-June perennial evergreen shrub	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #95799) is approximately 2 miles east of the treatment areas.	Possible
<i>Ceanothus divergens</i> Calistoga ceanothus	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, serpentine soils in chaparral at elevations between 170 and 950 meters. Known from LAK, NAP, and SON counties.	February-April perennial evergreen shrub	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #18682) is approximately 2.4 miles northeast of the treatment areas.	Possible
<i>Ceanothus purpureus</i> holly-leaved ceanothus	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, volcanic soils in chaparral, cismontane woodland at elevations between 120 and 640 meters. Known from NAP, SOL, and SON counties.	February-June perennial evergreen shrub	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #98445) is approximately 10.8 miles east-southeast of the treatment areas.	Possible

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<i>Ceanothus sonomensis</i> Sonoma ceanothus	Fed: None CA: None CEQA: 1B.2	Occurs on sandy, serpentine, and volcanic soils in chaparral at elevations between 215 and 800 meters. Known from LAK, NAP, and SON counties.	February-April perennial evergreen shrub	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #46117) is approximately 10.9 miles east-southeast of the treatment areas.	Possible
<i>Centromadia parryi</i> subsp. <i>parryi</i> pappose tarplant	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, coastal prairie, coastal salt marshes and swamps, meadows and seeps, and vernal mesic valley and foothill grassland often on alkaline soils at elevations between 0 and 420 meters. Known from BUT, COL, GLE, LAK, NAP, SMT, SOL, SON, and YOL counties.	May-November annual herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #56493) is approximately 10.54 miles south of the treatment areas.	Possible
<i>Chlorogalum pomeridianum</i> var. <i>minus</i> dwarf soaproot	Fed: None CA: None CEQA: 1B.2	Occurs in serpentine chaparral at elevations between 305 and 1,000 meters. Known from ALA, COL, GLE, LAK, SLO, SCL, SON, and TEH counties.	May-August perennial bulbiferous herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #34748) is approximately 6.9 miles southeast of the treatment areas.	Possible
<i>Clarkia gracilis</i> subsp. <i>tracyi</i> Tracy's clarkia	Fed: None CA: None CEQA: 4.2	Occurs on serpentine soils in chaparral openings at elevations between 65 and 650 meters. Known from COL, LAK, NAP, and TEH counties.	April-July annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest herbarium record (Mallek s.n., from 2007) approximately 17 miles northwest of the treatment areas.	Possible
<i>Collomia diversifolia</i> serpentine collomia	Fed: None CA: None CEQA: 4.3	Occurs in chaparral and cismontane woodland on gravelly, rocky serpentine (sometimes) soils at elevations between 200 and 600 meters. Known from CCA, COL, GLE, HUM, LAK, MEN, MRN, NAP, ORA, SHA, SON, STA, TEH, and YOL counties.	May-June annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest herbarium record (Mason 14152, from 1953) approximately 5 miles northeast of the treatment areas.	Possible

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<i>Cordylanthus tenuis</i> subsp. <i>brunneus</i> serpentine bird's-beak	Fed: None CA: None CEQA: 4.3	Occurs usually on serpentine soils in chaparral and cismontane woodland, closed-cone coniferous forest at elevations between 305 and 915 meters. Known from COL, GLE, LAK, MEN, NAP, and SON counties.	July-August annual herb (hemiparasitic)	Suitable vegetation associations and soil are present in the treatment areas, and the nearest herbarium record (Clifton s.n., from 1984) is approximately 1.9 miles north of the treatment areas.	Possible
<i>Cryptantha dissita</i> serpentine cryptantha	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 395 and 580 meters. Known from COL, LAK, MEN, SIS, and SON counties.	April-June annual herb	Suitable vegetation associations and soil are present in the treatment areas. This species is recorded as occurring on the property (EONDX #61076), last updated in 2020.	Present
<i>Delphinium uliginosum</i> swamp larkspur	Fed: None CA: None CEQA: 4.2	Occurs in serpentine seeps in chaparral and valley and foothill grassland at elevations between 340 and 610 meters. Known from BUT, COL, LAK, MEN, NAP, and SON counties.	May-June perennial herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (Hoover 5907, from 1942) is approximately 5.6 miles east on north side of Mt. St. Helena.	Possible
<i>Erigeron biolettii</i> streamside daisy	Fed: None CA: None CEQA: 3	Occurs in mesic and rocky broadleaved upland forest, cismontane woodland, and North Coast coniferous forest at elevations between 30 and 1,100 meters. Known from HUM, MEN, MRN, NAP, SOL, and SON counties.	June-October perennial herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (Ruygt 1059, from 1981) is approximately 9 miles to the east.	Possible
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine and volcanic soils in chaparral at elevations between 80 and 1,005 meters. Known from COL, LAK, NAP, and SON counties.	May-September perennial herb	Suitable vegetation associations and soil are present in the treatment areas. This species is recorded as occurring on the property (EONDX #99514), last updated in 2015.	Present
<i>Eriogonum nervulosum</i> Snow Mountain buckwheat	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 300 and 2,105 meters. Known from fewer than twenty occurrences in COL, GLE, LAK, NAP, and SON counties.	June-September perennial rhizomatous herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #14167) is approximately 2.4 miles northeast of the treatment areas.	Possible

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<i>Eriogonum umbellatum</i> var. <i>bahiiforme</i> bay buckwheat	Fed: None CA: None CEQA: 4.2	Occurs on rocky, often serpentine soils in cismontane woodland and lower montane coniferous forest at elevations between 700 and 2,200 meters. Known from ALA, CCA, COL, GLE, MEN, MNT, NAP, SBA, SBT, SCL, SON, and TEH counties.	July-September perennial herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (King s.n., from 1919) is approximately 9 miles to the east on the east side of Mt. St. Helena.	Possible
<i>Erythranthe nudata</i> bare monkeyflower	Fed: None CA: None CEQA: 4.3	Occurs in serpentine seeps in chaparral and cismontane woodland at elevations between 200 and 700 meters. Known from COL, GLE, LAK, MEN, NAP, SBA, and SON counties.	May-June annual herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (Hoffman 1686, from 1948) is approximately 8.1 miles to the east near Middletown.	Possible
<i>Erythronium helenae</i> St. Helena fawn lily	Fed: None CA: None CEQA: 4.2	Occurs on serpentine (sometimes) and volcanic (sometimes) soils in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland at elevations between 350 and 1,220 meters. Known from LAK, NAP, and SON counties.	March-May perennial bulbiferous herb	Suitable vegetation associations are present in the treatment areas. the nearest herbarium record (Bacigulpi, Hutchison, and Lyman 5574, from 1956) is approximately 4.7 miles to the east in the Mayacas Mountains. This species is recorded on a CalFlora checklist (record #gr14127) for the property.	Possible
<i>Fritillaria purdyi</i> Purdy's fritillary	Fed: None CA: None CEQA: 4.3	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest often on adobe soils at elevations between 175 and 2,255 meters. Known from COL, GLE, HUM, LAK, MEN, NAP, SON, TEH, TRI, and YOL counties.	March-June perennial bulbiferous herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (Baker s.n., from 1927) is approximately approximately 6 miles to the east in Robert Louis Stevenson State Park.	Possible
<i>Grimmia torenii</i> Toren's grimmia	Fed: None CA: None CEQA: 1B.3	Occurs in openings and on rocky, boulder, and rock walls in chaparral, cismontane woodland, lower montane coniferous forest on volcanic and carbonic soils at elevations between 325 and 1160 meters. Known from CCA, LAK, MEN, MNT, SCR, SMT counties.	moss	Suitable vegetation and rock associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #93675) is approximately 9 miles north-northeast of the treatment areas.	Possible

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<i>Harmonia hallii</i> Hall's harmonia	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 305 and 975 meters. Known from COL, LAK, NAP, and YOL counties.	(March) April-June annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #30700) is approximately 9.5 miles east-northeast of the treatment areas.	Possible
<i>Harmonia nutans</i> nodding harmonia	Fed: None CA: None CEQA: 4.3	Occurs on gravelly or rocky volcanic soils in chaparral and cismontane woodland at elevations between 75 and 975 meters. Known from LAK, NAP, SOL, SON, and YOL counties.	March-May annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest herbarium record (Bacigulpi, Robbins and Chisaki 5587, from 1956) is approximately 4.5 miles to the east-southeast just west of Mt. St. Helena.	Possible
<i>Hemizonia congesta</i> subsp. <i>congesta</i> congested-headed hayfield tarplant	Fed: None CA: None CEQA: 1B.2	Occurs in valley and foothill grassland, sometimes on roadsides, at elevations between 20 and 560 meters. Known from LAK, MEN, MRN, SFO, SMT, and SON counties.	April-November annual herb	Suitable vegetation associations and serpentine soils are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #109821) is approximately 6.1 miles south at Pepperwood.	Possible
<i>Hesperolinon</i> <i>adenophyllum</i> glandular western flax	Fed: None CA: None CEQA: 1B.2	Occurs (usually) on serpentine substrates in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 150 and 1,315 meters. Known from LAK and MEN counties.	May-August annual herb	Suitable vegetation associations and serpentine soils are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #18597) is approximately 7.3 miles north.	Possible
<i>Hesperolinon</i> <i>bicarpellatum</i> two-carpellate western flax	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 60 and 1,005 meters. Known from LAK, NAP, and SON counties.	(April) May-July annual herb	Suitable vegetation and soil (serpentine) associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #31000) is approximately 4.7 miles northeast.	Possible

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<i>Hesperolinon sharsmithiae</i> Sharsmith's western flax	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 270 and 300 meters. Known from LAK and NAP counties.	May-July annual herb	Suitable vegetation and soil (serpentine) associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #93573) is approximately 12.5 miles east.	Possible
<i>Layia septentrionalis</i> Colusa layia	Fed: None CA: None CEQA: 1B.2	Occurs on sandy, serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 100 and 1,095 meters. Known from BUT, COL, GLE, LAK, MEN, NAP, SON, SUT, TEH, and YOL counties.	April-May annual herb	Suitable vegetation associations and serpentine soils are present in the treatment areas. The nearest CNDDDB occurrence (EONDX #19667) is approximately 5.2 miles north.	Possible
<i>Leptosiphon aureus</i> bristly leptosiphon	Fed: None CA: None CEQA: 4.2	Occurs in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland at elevations between 55 and 1,500 meters. Known from ALA, BUT, COL, HUM, KRN, LAK, MEN, MRN, NAP, PLA, SBT, SCL, SCR, SMT, SOL, SON, and YUB counties.	April-July annual herb	Suitable vegetation associations are present in the treatment areas. The nearest collection (Neilson 3457, from 1975) is approximately 6.9 miles north to the west of Forest Lake. This species is also recorded on a CalFlora checklist (record #gr14127) for the property.	Possible
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	Fed: None CA: None CEQA: 1B.2	Occurs usually on volcanic soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 100 and 500 meters. Known from LAK, NAP, SOL, SON, and YOL counties.	March-May annual herb	Suitable vegetation and soil (volcanic) associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #82526) is approximately 3.4 miles west.	Possible
<i>Leptosiphon latisectus</i> broad-lobed leptosiphon	Fed: None CA: None CEQA: 4.3	Occurs in broadleafed upland forest and cismontane woodland at elevations between 170 and 1,500 meters. Known from COL, DNT, HUM, LAK, MRN, MEN, MNT, NAP, SBT, SFO, SMT, SHA, SON, TEH, TRI, and YOL counties.	April-June annual herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (Schemske 1C, from 1993) is approximately 8.5 miles south from Pepperwood Preserve.	Possible

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<i>Lessingia hololeuca</i> woolly-headed lessingia	Fed: None CA: None CEQA: 3	Occurs on clay and serpentine soils in broadleafed upland forest, coastal scrub, lower montane coniferous forest, and valley and foothill grassland at elevations between 15 and 305 meters. Known from ALA, FRE, MEN, MNT, MRN, NAP, SCL, SCR, SDG, SMT, SOL, SON, TEH, TUO, and YOL counties.	June-October annual herb	Suitable vegetation and soil (serpentine) associations are present in the treatment areas. The nearest herbarium record (Crampton 7153, from 1964) is approximately 10.5 miles southeast near Tubbs Lane in Calistoga.	Possible
<i>Lilium rubescens</i> redwood lily	Fed: None CA: None CEQA: 4.2	Occurs on serpentine (sometimes) soils in broadleafed upland forest, chaparral, lower montane coniferous forest, North Coast coniferous forest, and upper montane coniferous forest at elevations between 30 and 1,910 meters. Known from CCA, DNT, GLE, HUM, MEN, NAP, SHA, SIS, SON, and TRI counties.	April-August (September) perennial bulbiferous herb	Suitable vegetation and soil (serpentine) associations are present in the treatment areas, and the nearest herbarium record (Clifton s.n., from 1983) is approximately 6.5 miles north from Alder Creek.	Possible
<i>Lomatium repostum</i> Napa lomatium	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral and cismontane woodland at elevations between 90 and 1,030 meters. Known from LAK, NAP, SOL, and SON counties.	March-June perennial herb	Suitable vegetation and soil (serpentine) associations are present in the treatment areas, and the nearest herbarium record (Clifton s.n., from 1983) is approximately 6.5 miles north from near Lee Creek. This species is recorded on a CalFlora checklist (record #gr14127) for the property.	Possible
<i>Lupinus sericatus</i> Cobb Mountain lupine	Fed: None CA: None CEQA: 1B.2	Occurs in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest at elevations between 275 and 1,525 meters. Known from COL, LAK, NAP, and SON counties.	March-June perennial herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #30920) is approximately 1.8 miles east.	Possible
<i>Microseris paludosa</i> marsh microseris	Fed: None CA: None CEQA: 1B.2	Occurs in cismontane woodland, closed-cone coniferous forest, coastal scrub, and valley and foothill grassland at elevations between 5 and 355 meters. Known from MEN, MNT, MRN, SCR, SFO, SLO, SMT, SOL, and SON counties.	April-June (July) perennial herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #53648) is approximately 6.1 miles south at Pepperwood.	Possible

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<i>Mielichhoferia elongata</i> elongate copper moss	Fed: None CA: None CEQA: 4.3	Occurs in broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, and subalpine coniferous forest on acidic (usually), carbonate (sometimes), metamorphic, and vernal mesic (usually) substrates, often on roadsides, at elevations between 0 and 1960 meters. Known from SIS, HUM, TRI, LAK, BUT, PLU, SIE, NEV, PLA, TUO, MPA, MRN, SCL, SMT, SCR, MNT, SLO, FRE, TUL, and MPA counties.	moss	Suitable vegetation associations (seeps) are present in the treatment areas. The nearest herbarium record (Toren s.n., from 1998) is approximately 1.25 miles northeast from "Anderson Springs, near Cobb Mt.".	Possible
<i>Monardella viridis</i> green monardella	Fed: None CA: None CEQA: 4.3	Occurs in broadleafed upland forest, chaparral, and cismontane woodland at elevations between 100 and 1,010 meters. Known from LAK, LAX, MEN, NAP, and SON counties.	June-September perennial rhizomatous herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (LaPré s.n., from 1985) is approximately 1,600 feet north.	Possible
<i>Navarretia jepsonii</i> Jepson's navarretia	Fed: None CA: None CEQA: 4.3	Occurs on serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 175 and 855 meters. Known from COL, LAK, NAP, SLO, and YOL counties.	April-June annual herb	Suitable vegetation associations and serpentine soils are present in the treatment areas, and the nearest collection (Mason 12595, from 1945) is approximately 8.5 miles east "just below bridge E of Middletown."	Possible
<i>Navarretia paradoxinota</i> Porter's navarretia	Fed: None CA: None CEQA: 1B.3	Occurs on serpentine soils in vernal mesic openings of meadows and seeps and often in drainages at elevations between 165 and 840 meters. Known from COL, LAK, and NAP counties.	May-June (July) annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDB occurrence (EONDX #111455) is approximately 6.9 miles east.	Possible
<i>Orobanche valida</i> subsp. <i>howellii</i> Howell's broomrape	Fed: None CA: None CEQA: 4.3	Occurs on serpentine and volcanic soils in chaparral at elevations between 180 and 1,740 meters. Known from LAK county. Generally parasitic on <i>Garrya</i> spp.	June-September perennial herb (parasitic)	Suitable vegetation and soil (serpentine) associations are present in the treatment areas, and the nearest herbarium record (Clifton s.n., from 1984) is approximately 7.6 miles north.	Possible

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<i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	Fed: None CA: None CEQA: 1B.3	Occurs in rocky chaparral at elevations between 700 and 1,370 meters. Known from LAK, NAP, and SON counties.	April-August perennial herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDB occurrence (EONDX #30687) is approximately 4.7 miles north.	Possible
<i>Ranunculus lobbii</i> Lobb's aquatic buttercup	Fed: None CA: None CEQA: 4.2	Occurs in mesic cismontane woodland, North Coast coniferous forest, valley and foothill grassland, and vernal pools at elevations between 15 and 470 meters. Known from ALA, CCA, LAK, MEN, MNT, MRN, NAP, SAC, SCL, SCR, SMT, SOL, and SON counties.	February-May annual herb (aquatic)	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium collection (Stone and Davilla 654, from 1985) is approximately 5.1 miles south.	Possible
<i>Ribes victoris</i> Victor's gooseberry	Fed: None CA: None CEQA: 4.3	Occurs in shady, mesic broadleafed upland forest and chaparral at elevations between 100 and 750 meters. Known from NAP county.	March-April perennial deciduous shrub	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium collection (Jepson 13507, from 1893) is approximately 6 miles east.	Possible
<i>Sidalcea oregana</i> subsp. <i>hydrophila</i> marsh checkerbloom	Fed: None CA: None CEQA: 1B.2	Occurs in mesic meadows and seeps and riparian forest at elevations between 1,100 and 2,300 meters. Known from COL, GLE, LAK, MEN, and NAP counties. Can intergrade with subsp. <i>valida</i> .	(June) July-August perennial herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDB occurrence (EONDX #543) is approximately 7.4 miles north.	Possible
<i>Streptanthus barbiger</i> bearded jewelflower	Fed: None CA: None CEQA: 4.2	Occurs in chaparral on serpentine soils at elevations between 150 and 1,070 meters. Known from COL, LAK, and SON counties.	May-July annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest herbarium record (Stone and Clifton 549, from 1983) is approximately 2.3 miles north.	Possible

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SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Streptanthus brachiatus</i> subsp. <i>brachiatus</i> Socrates Mine jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs usually on serpentine soils in chaparral and closed-cone coniferous forest at elevations between 545 and 1,000 meters. Known from fewer than ten occurrences in LAK, NAP, and SON counties. Plants from LAL county are more appropriately assigned to <i>S. brachiatus</i> subsp. <i>hoffmanii</i> .	May-June perennial herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDB occurrence (EONDX #4498) is approximately 1.65 miles north.	Possible
<i>Streptanthus brachiatus</i> subsp. <i>hoffmanii</i> Freed's jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral and cismontane woodland at elevations between 490 and 1,220 meters. Known from approximately ten occurrences in LAK and SON counties.	May-July perennial herb	Suitable vegetation associations are present in the treatment areas and this species is recorded as occurring on the property (EONDX #45165), last updated in 2011.	Present
<i>Streptanthus glandulosus</i> subsp. <i>hoffmanii</i> Hoffman's bristly jewelflower	Fed: None CA: None CEQA: 1B.3	Occurs in chaparral, cismontane woodland, and valley and foothill grasslands on rocky and serpentine (often) substrates at elevations between 120 and 475 meters. Known from MEN, LAK and SON counties.	March-July annual herb	Suitable vegetation associations are present in the treatment areas and this species is recorded as occurring on the property (EONDX #120908 & 120909), last updated in 2021.	Present
<i>Streptanthus hesperidis</i> green jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, serpentine soils in chaparral openings and cismontane woodland at elevations between 130 and 760 meters. Known from LAK, NAP, and YOL counties.	May-July annual herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDB occurrence (EONDX #49261) is approximately 6.7 miles northeast.	Possible
<i>Streptanthus morrisonii</i> subsp. <i>elatus</i> Three Peaks jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 90 and 815 meters. Known from LAK and NAP counties.	June-September perennial herb	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDB occurrence (EONDX #95212) is approximately 8.1 miles east.	Possible

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SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK1	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Stuckenia filiformis</i> subsp. <i>alpina</i> northern slender pondweed	Fed: None CA: None CEQA: 2B.2	Occurs in shallow freshwater marshes and swamps at elevations between 300 and 2,150 meters. Known from ALA, BUT, CCA, ELD, LAS, MER, MNO, MOD, MPA, PLA, SCL, SHA, SIE, SIS, SMT, SOL, and SON counties. To be expected in the San Joaquin Valley, San Francisco Bay area, and the central high Sierra Nevada.	May-July perennial rhizomatous herb (aquatic)	Suitable vegetation associations and soil are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #74341) is approximately 5.2 miles southeast.	Possible
<i>Trichostema ruygtii</i> Napa bluecurls	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, and vernal pools at elevations between 30 and 680 meters. Known from LAK, NAP, SOL, and SON counties.	June-October annual herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #77691) is approximately 8.1 miles east.	Possible
<i>Trifolium hydrophilum</i> saline clover	Fed: None CA: None CEQA: 1B.2	Occurs in marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations between 0 and 300 meters. Known from ALA, CCA, LAK, MEN, MNT, NAP, SAC, SBT, SCL, SCR, SJQ, SLO, SMT, SOL, SON, and YOL counties. Many sites likely extirpated.	April-June annual herb	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #84604) is approximately 8.1 miles east.	Possible
<i>Triteleia lugens</i> dark-mouthed triteleia	Fed: None CA: None CEQA: 4.3	Occurs in broadleaved upland forest, chaparral, coastal scrub, and lower montane coniferous forest at elevations between 100 and 1,000 meters. Known from NAP, SBT, SOL, and SON counties.	April-June perennial bulbiferous herb	Suitable vegetation associations are present in the treatment areas, and the nearest herbarium record (Nelson 4074, from 1982) is approximately 3.8 miles northeast.	Possible
<i>Viburnum ellipticum</i> oval-leaved viburnum	Fed: None CA: None CEQA: 2B.3	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest at elevations between 215 and 1,400 meters. Known from ALA, CCA, ELD, FRE, GLE, HUM, LAK, MEN, NAP, PLA, SHA, SOL, SON, and TEH counties.	May-June perennial deciduous shrub	Suitable vegetation associations are present in the treatment areas, and the nearest CNDDDB occurrence (EONDX #49961) is approximately 6.1 miles south at Pepperwood.	Possible

¹Federal listing codes:

FE Federally listed as Endangered
 FT Federally listed as Threatened
 FPE Federally proposed for listing as Endangered

California listing codes:

SE State listed as Endangered
 ST State listed as Threatened
 SR State listed as Rare

California Native Plant Society codes:

1A Presumed extinct in California
 1B Rare or Endangered in California and elsewhere
 2 Rare or Endangered in California, more common elsewhere

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FPT	Federally proposed for listing as Threatened	SCE	State candidate for listing as Endangered	3	Plants for which we need more information - Review list
FPD	Federally proposed for delisting	SCT	State candidate for listing as Threatened	4	Plants of limited distribution - Watch list
FC	Federal candidate species (former Category 1 candidates)				
SC	Species of Concern – No longer maintained by USFWS				

California Native Plant Society Threat Codes:

- .1 Seriously Endangered in California (over 80% of occurrences Threatened / high degree and immediacy of threat)
- .2 Fairly Endangered in California (20-80% occurrences Threatened)
- .3 Not very Endangered in California (<20% of occurrences Threatened or no current threats known)

Notes: CNPS List 1A and some List 3 plant species lacking any threat information receive no threat code extension. CNPS R-E-D Codes have been discontinued -

Blooming times given by the CNPS Inventory

EONDX is the CNDDDB Element Occurrence Index number which corresponds to unique records in the California Natural Diversity Database.

Abbreviations

AMA Amador	MER Merced	SFO San Francisco
BUT Butte	MNT Monterey	SHA Shasta
CAL Calaveras	MPA Mariposa	SIE Sierra
CCA Contra Costa	MRN Marin	SIS Siskiyou
CNDDDB CA Natural Diversity Database	NAP Napa	SJQ San Joaquin
CNPS CA Native Plant Society	NEV Nevada	SMI San Miguel Island
COL Colusa	ORA Orange	SMT San Mateo
DNT Del Norte	PLA Placer	SNI San Nicolas Island
ELD El Dorado	PLU Plumas	SOL Solano
FRE Fresno	RIV Riverside	SON Sonoma
GLE Glenn	SAC Sacramento	SRO Santa Rosa Island
HUM Humboldt	SBA Santa Barbara	TEH Tehama
KRN Kern	SBD San Bernardino	TRI Trinity
LAK Lake	SBT San Benito	TUL Tulare
LAS Lassen	SCL Santa Clara	VEN Ventura
LAX Los Angeles	SCR Santa Cruz	YOL Yolo
MAD Madera	SCT Santa Catalina Island	YUB Yuba
MOD Modoc	SCZ Santa Cruz Island	
MEN Mendocino	SDG San Diego	

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Table 3.7-3: Special Status Wildlife Present or Potentially Occurring in the Treatment Areas

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
FEDERAL/STATE LISTED, PROPOSED, CANDIDATE AND/OR FULLY PROTECTED SPECIES				
<u>FISH</u>				
<i>Oncorhynchus kisutch</i> pop. 4 coho salmon - central California coast ESU	FE SE	The coho salmon is an anadromous fish that spend several years in the ocean; returning to freshwater rivers and tributaries to spawn and rear. The Central California Coast ESU listing includes all naturally spawned anadromous coho populations below natural and manmade impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers (70 FR 37160). Tributary streams to Suisun Marsh including Suisun Creek, Green Valley Creek, and an unnamed tributary to Cordelia Slough (commonly referred to as Red Top Creek), excluding the Sacramento-San Joaquin River Basin, as well as two artificial propagation programs: the Don Clausen Fish Hatchery, and Kingfisher Flat Hatchery/ Scott Creek (Monterey Bay Salmon and Trout Project) steelhead hatchery programs (70 FR 37160).	The nearest CNDDDB occurrence (EONDX #10186) was recorded in 2017 in Dry Creek and its tributaries, approximately 8.5 miles southwest of the treatment areas. Suitable spawning and juvenile rearing habitat is present in the streams within the treatment areas.	Possible

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Oncorhynchus mykiss irideus</i> pop. 8 steelhead - central California coast DPS	FT	An anadromous fish that spend several years in the ocean; returning to freshwater rivers to spawn and rear. Listing includes all naturally spawned anadromous steelhead populations (and their progeny) below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (70 FR 37160). Designated critical habitat encompasses 2,308 miles streams, 254 square miles estuary habitat in Tehama, Butte, Glenn, Shasta, Yolo, Sacramento, Solano, Yuba, Sutter, Placer, Calaveras, San Joaquin, Stanislaus, Tuolumne, Merced, Alameda, Contra Costa counties (70 FR 52488). The North Diablo Range watershed and South San Francisco Bay entire unit were excluded from the designation based on their potential economic impact (70 FR 52488). Primary constituent elements include: (1) freshwater spawning sites, (2) freshwater rearing sites, (3) freshwater migration corridors free of obstructions, (4) estuarine areas free of obstructions, and (5) nearshore marine areas free of obstructions (70 FR 52488).	The nearest CNDDDB occurrence (EONDX #79273) was recorded in 2004 in the southern portion of the treatment areas at the confluence of McDonnell and Ingalls Creeks. Suitable spawning and juvenile rearing habitat is present in the streams within the treatment areas.	Possible
<u>AMPHIBIANS</u>				
<i>Rana draytonii</i> California red-legged frog	FT SSC	A medium-sized frog that inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation (Bulger et al. 2003, Jennings and Hayes 1994, Stebbins 2003).	The nearest CNDDDB occurrence (EONDX #119850) was recorded in 1945 near Cobb Mountain, approximately 5.3 miles north of the treatment areas. Suitable habitat is present in the streams within the treatment areas, although there have been no recent occurrences of the species in northeastern Sonoma County.	Possible
<u>REPTILES</u>				

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Emys marmorata</i> northwestern pond turtle	FC SSC	Inhabits permanent or nearly permanent bodies of water and low gradient slow-moving streams below 6,000 feet elevation.	The nearest CNDDDB occurrence (EONDX #42860) was recorded within the treatment areas in 1998, in Little Sulphur Creek near the treatment area's northern border. Suitable aquatic habitat for this species is present in streams throughout the treatment areas, and they may nest in open grasslands or sparsely vegetated areas near streams within the treatment areas.	Present
<u>BIRDS</u>				
<i>Aquila chrysaetos</i> golden eagle	BCC FP	A large diurnal raptor that nests on cliffs and in large trees in open areas. Forages in open terrain including grasslands, deserts, savannahs and early successional stages of forest and shrub habitats (Kochert et al. 2002). A year-round resident in the greater Bay Area. Breeding activities begin in December in California.	The nearest CNDDDB occurrence (EONDX #65750) was recorded in 1986 near Clear Lake, approximately 16.5 miles northeast of the treatment areas. Suitable nesting habitat is present in large trees within the treatment areas and in the steep cliffs immediately east of the treatment areas.	Possible
<i>Elanus leucurus</i> white-tailed kite	FP	Inhabits grasslands, agriculture fields, oak woodlands, savannah and riparian habitats in rural and urban areas. Typically nests in trees surrounded by open foraging habitat.	The nearest CNDDDB occurrence (EONDX #6468) was recorded in 1985 near Healdsburg, approximately 6.9 miles southwest of the treatment areas. Suitable nesting habitat is present in trees throughout the treatment areas, and the species may forage in grasslands within the treatment areas.	Possible
<i>Falco peregrinus anatum</i> American peregrine falcon	BCC FP	Nest on cliffs, rocky outcrops, bare ground and man-made structures such as bridges, buildings and other tall, prominent structures (Baicich and Harrison 2005). They feed primarily on birds; however, they may also consume many small mammals including bats and various rodents.	The nearest CNDDDB occurrence (EONDX #45627) was recorded in 2001 somewhere within the Detert Reservoir quadrangle, though due to the sensitivity of the species the exact location is suppressed. Suitable nesting habitat is present in the steep cliffs immediately east of the treatment areas.	Possible
<u>MAMMALS</u>				

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Bassariscus astutus raptor</i> northern California ringtail	FP	A small, nocturnal carnivore that feeds on arthropods, rodents, lizards, amphibians, small birds and a variety of fruits and berries. Inhabits a variety of areas from riparian, montane and coniferous woodlands, chaparral, desert and tropical habitats with rocky outcroppings, canyons, or talus slopes near open water up to 1,400 meters (Poglayen-Neuwall and Toweill 1988). This subspecies is thought to occur from the Coast Ranges to the Sierras from Oregon to Ventura County, California. Breeding season occurs from February to May. Dens in rocky areas in crevices, tree hollows, dens made by other animals, and manmade structures in rural /suburban areas; relocates to new denning site every few days.	Although CNDDD does not track ringtail, this species was observed using a camera station in the treatment area as recently as 2021. Suitable habitat is present in woodlands and riparian zones within the treatment areas.	Present
<u>SENSITIVE AND LOCALLY RARE SPECIES</u>				
<u>FISH</u>				
<i>Hesperoleucus venustus navarroensis</i> northern coastal roach (Navarro roach)	SSC	Small, bronzy subspecies of the California roach. Prefers cool pool habitats with low water velocity, most often in mi-elevation stream habitats associated with agricultural land use, rangeland, and development. Can exist in heavily modified or disturbed habitats. Confined to the Navarro River and its tributaries (Baumsteiger et al. 2017).	The nearest CNDDDB occurrence (EONDX #42695) was recorded in 1999 in the Russian River at Healdsburg, approximately 8 miles southwest of the treatment areas. Suitable habitat is present in the streams within the treatment areas, including McDonnell and Ingalls Creeks.	Possible
<i>Hysterocarpus traskii pomo</i> Russian River tule perch	SSC	Small, deep bodied fish confined to the Russian River and its tributaries in Sonoma and Mendocino counties. Requires clear, flowing water and abundant cover. Rarely found in waters exceeding 25 degrees Celsius, except within Clear Lake; this species has a high salinity tolerance.	The nearest CNDDDB occurrence (EONDX #42858) was recorded in 1999 in Mayacama Creek near Highway 128, approximately 3.6 miles south of the treatment areas. Suitable habitat is present in the streams within the treatment areas, including McDonnell and Ingalls Creeks.	Possible

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Mylopharodon conocephalus</i> hardhead	SSC	A cyprinid fish whose range extends from the Kern River to the Pit River; it is known to occur in the Russian River drainage, and is widely distributed in low- to mid- elevation warmwater (>68 degrees Fahrenheit) streams in the Sacramento-San Joaquin drainage below 1500 meters elevation, but populations are becoming increasingly isolated. Hardhead are typically found in small to large streams in a low to mid-elevation environment and may also inhabit lakes or reservoirs. Most hardhead reach sexual maturity at 3 years and spawn in the spring around April-May, though spawning may take place as late as August. Though spawning may occur in pools, runs, or riffles, the bedding area will typically be characterized by gravel and rocky substrate (CalFish 2016).	The nearest CNDDDB occurrence (EONDX #74948) was recorded in 2000 in Sausal Creek near Pine Flat Road, approximately 1.9 miles southwest of the treatment areas. Suitable habitat is present in the streams within the treatment areas, including McDonnell and Ingalls Creeks.	Possible
AMPHIBIANS				
<i>Dicamptodon ensatus</i> California giant salamander	SSC	Large, stocky terrestrial salamander. Occur primarily in humid coastal forests from Santa Cruz County to southern Mendocino and Lake Counties. Found near streams in damp conditions; aquatic adults and larvae inhabit cool, rocky streams and occasionally lakes and ponds (Zeiner et al. 1990).	There are two CNDDDB occurrences located within the treatment areas, both of which were recorded in 1996: one in Ingalls Creek in the eastern portion of the site (EONDX #100692) and one in Bluegum Creek on the southern border of the site (EONDX #100691). Furthermore, an occurrence of steelhead (EONDX #79273) recorded in 1999 within the treatment areas at the confluence of McDonnell and Ingalls Creeks also noted the presence of California giant salamander larvae. Suitable habitat is present for this species in stream habitats throughout the treatment areas.	Possible

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Rana boylei</i> pop 1 foothill yellow-legged frog – northwestern/north coast DPS	SSC	A medium-sized frog that inhabits rocky, cascading streams in woodland, chaparral, and coniferous forests from the Oregon border to San Luis Obispo County and the western foothills of the Sierra Nevada below 6000 feet.	There are four CNDDDB occurrences recorded within the treatment areas: 1) EONDX #34565, recorded in 1998 in Little Sulphur Creek in the northern portion of the treatment areas; 2) EONDX #113150, recorded in 1996 in McDonnell Creek near the center of the treatment areas; 3) EONDX #57877, recorded in 2010 at the confluence of McDonnell and Ingalls Creeks in the southern portion of the treatment areas; and 4) EONDX #113103, recorded in 1996 in Bluegum Creek on the southern border of the treatment areas. Suitable habitat is present for this species in streams throughout the treatment areas. Two adults and one egg mass were observed in McDonnell Creek during the April 2023 site visit.	Present
<i>Taricha rivularis</i> red-bellied newt	SSC	Stream or river-dwellings newt of coastal woodlands and redwood forest. Known from Sonoma County north to Humboldt County and inland to Lake County with a disjunct population occurring in the Stevens Creek watershed of Santa Clara County.	The nearest CNDDDB occurrence (EONDX #104213) was recorded in 1951 in Little Sulphur Creek along Geysers Road, approximately 3 miles northwest of the treatment areas. This occurrence notes that adults were collected in 2012 as well, so may not be entirely historic. Several other occurrences, both historic and more recent, are present in the 9-quad search area. Suitable habitat for this species is present in streams throughout the treatment areas. Numerous adults were observed in McDonnell and Ingalls Creeks during the April 2023 site visit.	Present
BIRDS				
<i>Accipiter striatus</i> sharp-shinned hawk	WL	This species prefers north-facing slopes in dense stands of deciduous, conifer and mixed hardwood trees, including ponderosa pine, black oak, and Jeffrey pines, preferably in riparian areas; also known to nest in suburban areas.	The nearest CNDDDB occurrence (EONDX #24351) was recorded in 1993 near Calistoga, approximately 11 miles southeast of the treatment areas. Suitable habitat is present in woodlands present within the treatment areas, particularly dense woodlands on slopes.	Possible

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Progne subis</i> purple martin	SSC	The largest swallow species occurring in North America, the purple martin ranges along the west coast from Big Sur along the Central California Coast north to British Columbia, Canada (Brown 1997). Inhabits montane forests and lowland coastal and inland foothills. Martins exhibit high site fidelity and are secondary-cavity nesters, utilizing woodpecker cavities in trees and dead snags, but also nest in Saguaro cacti, cliffs and man-made structures such as bridges, power poles, street lamps, and bird boxes (Brown 1997). Breeding occurs from April through August and may be double- or triple-brooded (Brown 1997, Baicich and Harrison 2005). Purple martins feed exclusively on flying insects caught on the wing typically 50-150 m (~160-500 ft) above the ground (Brown 1997).	The nearest CNDDDB occurrence (EONDX #71279) was recorded in 2000 in the Mayacamas Mountains, approximately 2.1 miles north of the treatment areas. Suitable nesting habitat is present in trees throughout the treatment areas.	Possible
MAMMALS				
<i>Antrozous pallidus</i> pallid bat	SSC WBWG-H	Inhabits rocky terrain in open areas in lowlands, foothills and mountainous areas near water throughout California below 2,000 meters. Roost in caves, rock crevices, mines, hollow trees, buildings, and bridges in arid regions in low numbers (<200). Active from March-November; migrates in some areas but may hibernate locally.	The nearest CNDDDB occurrence (EONDX # 43669) was recorded in 1996 in a winery building along Chalk Hills Road, approximately 5.3 miles south of the treatment areas. Suitable habitat is present in trees and potentially in caves in cliff faces within the treatment areas.	Possible
<i>Erethizon dorsatum</i> North American porcupine	SA	Large quill-covered rodent that commonly inhabits coniferous and mixed forested areas, occasionally shrubland and tundra. Makes dens in hollow trees or rocky areas.	Suitable denning habitat is present within the treatment areas. There are two occurrences of the species within the assessment area, the nearest of which is from 2014 and located approximately 11.5 miles northeast of the treatment areas (EONDX #107923).	Possible
<i>Lasiurus cinereus</i> hoary bat	SA WBWG-M	A solitary foliage rooster that prefers evergreens, but will use deciduous trees in forested habitats, particularly in edge habitat (Bolster 2005).	Suitable roosting habitat is present within trees throughout the treatment areas. There are two occurrences of the species within the assessment area, the nearest of which is from 1999 and located approximately 8.3 miles northeast of the treatment areas (EONDX #69768).	Possible

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SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Lasiurus frantzii</i> western red bat	SSC WBWG-H	Primarily associated with intact riparian habitat. Roosts individually in foliage within trees along riparian areas, orchards and suburban areas. Favors cottonwoods, willows, sycamores, and walnut trees (Bolster 2005).	The nearest CNDDDB occurrence (EONDX #69769) was recorded in 2000 near Ettawa Springs, approximately 8.0 miles north of the treatment areas. Suitable roosting habitat is present in the foliage of trees throughout the treatment areas.	Possible
<i>Myotis evotis</i> long-eared myotis	SA WBWG-M	Typically inhabits brushy woodland habitats and coniferous forests up to 2,800 meters throughout California except the Central Valley and deserts. Roosts in a variety of habitats including exfoliating bark, tree hollows, caves, rotten stumps, snags, cliff crevices and bridges. A foliage gleaner that requires nearby water.	Suitable roosting habitat is present within trees throughout the treatment areas. There is one occurrences of the species within the assessment area, it is from 2000 and located approximately 8.3 miles northeast of the treatment areas (EONDX #69767).	Possible
<i>Myotis thysanodes</i> fringed myotis	SA WBWG-H	Exhibits a strong roosting preference for large trees and snags, but will use buildings, caves, rock crevices, etc., if necessary. Inhabits a variety of woodland, scrub and grassland habitats up to 2,850 meters throughout California except for Central Valley and southern deserts. Forages great distances and is active during winter months. Highly sensitive to human disturbance.	Suitable roosting habitat is present within trees throughout the treatment areas. There are two occurrences of the species within the assessment area, the nearest of which is from 1999 and located approximately 8.3 miles northeast of the treatment areas (EONDX #69766).	Possible
<i>Pekania pennanti</i> fisher	SSC	Small, carnivorous member of the weasel family that inhabits coniferous and mixed-hardwood forests from the boreal forests of Alaska to the Sierra Nevada range of California.	The nearest CNDDDB occurrence (EONDX #90288) was recorded on a camera station in 2013 in a mountainous area approximately 1.1 miles east of the treatment areas. This was reported as an unusual occurrence of the species further south than they had previously been recorded, and as such they are likely to be very rare in this region. Suitable habitat is present in woodlands throughout the treatment areas.	Possible
<i>Taxidea taxus</i> American badger	SSC	Inhabits open areas with friable soils within woodland, grassland, savannah and desert habitats. A fossorial mammal that preys predominately on ground squirrels (<i>Ammospermophilus</i> and <i>Spermophilus</i> spp.) and pocket gophers (<i>Thomomys</i> spp.).	The nearest CNDDDB occurrence (EONDX #83040) was recorded in 2011 at Pepperwood Preserve, approximately 7.9 miles south of the treatment areas. This occurrence notes that badger presence was not actually confirmed at this location, but that several apparent badger burrows were detected. Suitable habitat is present in grassland portions of the treatment areas, though the species appears to be rare in this region.	Possible

¹Federal Listings:

FE: Federally Endangered

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FT: Federally Threatened

FC: Federal Candidate for Listing

BCC: Federal Bird of Conservation Concern

State Listings:

ST: State Threatened

SC: State Candidate for Listing

SSC: State Species of Special Concern

FP: State Fully Protected Species

WL: CDFW Watch List Species

Other Designations:

WBWG-H: Western Bat Work Group High Priority Species; the species is considered imperiled or at high risk of imperilment.

WBWG-M: Western Bat Work Group Medium Priority Species; a lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat.

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Impact BIO-1

Assessment and Findings:

Initial vegetation treatments and maintenance treatments could result in direct and indirect adverse effects on the 47 special-status plant species with the potential to occur in the treatment areas. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments, as the same treatment activities would occur.

SPR BIO-7 would apply to all treatment activities, including maintenance treatments. Pursuant to SPR BIO-7, protocol-level surveys for special-status plants would not be required if the target special-status plant species are herbaceous annual species, stump sprouting species, or geophyte species, and 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 would 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.

Conclusion

Of the 80 special-status plants with the potential to occur in the treatment areas, six are federally or state listed. Those six are Clara Hunt's milkvetch, Sonoma sunshine, Lake County western flax, Sebastopol meadowfoam, Geyser's panicum, and Lake County stonecrop. All of the 80 special-status plants with the potential to occur have California Rare Plant Ranks as indicated in Table 3.7-2.

Thirty-eight (38) of these are annual herbaceous species, seven are geophytic perennial species, 24 are herbaceous perennials, and nine are shrubs. Impacts on annual herbaceous, geophytic, and perennial herbaceous species would be avoided by implementing non-ground-disturbing treatment activities during the dormant season (e.g., when the plants have no aboveground parts or have completed their annual life cycle and set seed). If treatments cannot be completed in the dormant season and would be implemented during the growing period of these species, protocol surveys (per SPR BIO-7) and avoidance of any identified plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented, as described below.

Of the nine special-status shrubs with the potential to occur in the treatment areas, four (Rincon Ridge manzanita, Rincon ridge ceanothus, holly-leaved ceanothus, and Sonoma ceanothus) are deciduous non-stump sprouting shrubs. These species could not be avoided in the same manner as herbaceous annual, geophytic perennial, or perennial herbaceous species and protocol surveys (per SPR BIO-7) and avoidance of any identified plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented, as described below.

Where protocol-level surveys are required (per SPR BIO-7) and special-status plants are identified during these surveys, Mitigation Measures BIO-1a and BIO-1b would be implemented to avoid loss of identified special-status plants. Per Mitigation Measures BIO-1a and BIO-1b, if special-status plants are identified during protocol-level surveys, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which no treatment would occur unless a qualified biologist determines that the species would benefit from treatment in the occupied habitat area.

In the event that special-status plants are identified during protocol-level surveys and cannot be avoided during project implementation, Mitigation Measure BIO-1c would be implemented. Under Mitigation Measure BIO-1c, 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. 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.

The potential for treatment activities, including maintenance treatments, to result in adverse effects on special-status plants was examined in the PEIR. This impact on special-status plants is within the scope of the PEIR because the affected special-status plant species were covered in the PEIR, and the initial treatment activities, maintenance

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treatment activities, and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. SPRs applicable to this impact are BIO-1, BIO-2, BIO-6, BIO-7, BIO-9, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, and GEO-7. This determination is consistent with the PEIR and this impact would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-2

Assessment and Findings

Potential adverse effects to special-status wildlife species with suitable habitat within the project area due to mechanical treatments, manual treatments and prescribed burning associated with the proposed project are discussed below. The proposed project could result in direct or indirect adverse effects on special-status wildlife species and habitat suitable for these species within the treatment areas, as described in the following sections.

Special Status Anadromous Fish Species and other Special Status Fish

Two special status anadromous fish species potentially occur in the treatment areas, coho salmon (*Oncorhynchus kisutch* pop. 4) and steelhead – Central California Coast DPS (*Oncorhynchus mykiss irideus* pop. 8). Suitable spawning and juvenile rearing habitat is present in McDonnell Creek and Little Sulphur within the treatment areas, and Ingalls Creek adjacent to the treatment areas. These streams appear to have high water quality and are accessible to anadromous fish (NOAA 2016). Coho salmon was documented in the CNDDDB within Dry Creek and its tributaries in 2017 approximately 8.5 miles southwest of the treatment areas. The nearest CNDDDB occurrence for steelhead was recorded in 2004 in the southern portion of the treatment areas at the confluence of McDonnell and Ingalls Creeks.

In accordance with SPR BIO-1, no mitigation would be required for special status anadromous fish species if it is determined that adverse effects to special status anadromous fish species can be avoided by physically avoiding suitable habitat. The treatment areas exclude aquatic features such as streams potentially used by special status anadromous fish species in accordance with SPR HYD-4. Aquatic habitat function for special status anadromous fish species would be maintained by the implementation of WLPZs per SPR HYD-4 and measures specified by SPR BIO-4. Because the proposed treatment avoids habitat that special status anadromous fish species would potentially use, no mitigation is required for these species.

In addition to coho salmon and steelhead, suitable habitat for three other special status fish species is present within the treatment areas: northern coastal roach / Navarro roach (*Hesperoleucus venustus navarroensis*), Russian River tule perch (*Hyserocarpus traskii pomo*), and hardhead (*Mylopharodon conocephalus*). Suitable aquatic habitat for all three species is present within McDonnell, Ingalls, and Little Sulphur Creeks. As described above for special status anadromous fish, impacts to these species will be avoided through the implementation of SPR HYD-4 and no further mitigation is required for these species.

California Red-legged Frog (*Rana draytonii*)

The California red-legged frog predominantly inhabits permanent water sources such as streams, lakes, marshes, natural and man-made ponds, and ephemeral drainages in valley bottoms and foothills up to 1,500 meters (4,921 feet) in elevation (Jennings and Hayes 1994, Bulger et al. 2003, Stebbins 2003). Adults breed in a variety of aquatic habitats, while larvae and metamorphs use streams, deep pools, backwaters of streams and creeks, ponds, marshes, sag ponds, dune ponds, and lagoons.

Although the treatment areas lack ponded or slow-moving lotic habitat combined with aquatic vegetation, there is suitable habitat in the streams within the treatment areas, including McDonnell Creek, Little Sulphur Creek, Ingalls Creek (adjacent to the treatment areas), and other intermittent streams. This species may utilize stream habitats within the treatment areas for breeding, foraging, as movement corridors, and for other life history requirements. The nearest CNDDDB occurrence of the species (EONDY #119850) was recorded in 1945 near Cobb Mountain, approximately 5.3 miles north of the treatment areas. While there is suitable habitat within the treatment areas, it should be noted that there have been no recent occurrences of the species in northeastern Sonoma County.

In accordance with SPR BIO-1, no mitigation would be required for California red-legged frog if it is determined that adverse effects to this species can be avoided by physically avoiding suitable habitat. The treatment areas exclude

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aquatic features such as ponds potentially used for breeding by California red-legged frog in accordance with SPR HYD-4. Aquatic habitat function for California red-legged frog would be maintained by the implementation of WLPZs per SPR HYD-4 and measures specified by SPR BIO-4, including that only hand application of herbicides approved for use in aquatic environments will be allowed in riparian habitat and only during low-flow periods or when seasonal streams are dry.

California red-legged frog will occasionally use upland habitat near aquatic features for migration and aestivation and therefore may be present outside of the 50-to-150-foot WLPZs created adjacent to all aquatic habitat within the treatment areas by the implementation of SPR HYD-4. Migration of California red-legged frog is highly correlated with seasonal rain. To avoid potential migrating California red-legged frogs, treatment activities within 300 feet of Class I & II watercourses will be timed to occur outside of the wet season, between May 1 and November 15. Additionally, in accordance with SPR BIO-2, crew members and contractors will receive training regarding biological resources from a qualified RPF or biologist familiar with the life history of California red-legged frog, so crews are aware of potential for California red-legged frog to occur within the treatment areas in addition to measures to reduce adverse effects.

If treatment activities must occur during the wet season:

In accordance with SPR BIO-10, a qualified RPF or biologist shall conduct focused or protocol-level surveys for California red-legged frog within suitable habitat that is not covered by the above take scenarios. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. However, as stated in SPR BIO-10, if presence of California red-legged frog is assumed, then focused or protocol surveys may not be required.

If California red-legged frog is not detected, then no further mitigation for the species would be required. If California red-legged frog is 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 California red-legged frog by implementing Mitigation Measure BIO-2a. Mitigation Measure BIO-2a provides the project proponent with the option to either: (1) not implement treatment within the occupied habitat; or (2) implement treatment outside the sensitive period of the species' life history. Pursuant to Mitigation Measure BIO-2a, CDFW and USFWS 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. Consultation with CDFW and USFWS pursuant to Mitigation Measure BIO-2a would potentially allow for treatment to 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. If a California red-legged frog is discovered during treatment, all work would cease, and the individual would be left to leave on its own volition. If the frog will not or cannot leave on its own, a USFWS- and CDFW- approved and permitted biologist will be contacted to relocate the frog outside of the treatment areas.

If the project proponent cannot avoid mortality, injury or disturbance to California red-legged frog, then the project proponent will implement Mitigation Measure BIO-2c. Mitigation Measure BIO-2c states that 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. Compensation may include: (1) Preserving existing habitat outside of the treatment areas in perpetuity; or (2) restoring or enhancing existing habitat within the treatment areas or outside of the treatment areas. In addition, the project proponent will prepare a Compensatory Mitigation Plan in accordance with Mitigation Measure BIO-2c that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.

In accordance with SPR BIO-2, crew members and contractors will receive training regarding biological resources from a qualified RPF or biologist familiar with the life history of California red-legged frog. SPR BIO-2 enables crews

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to be aware of the potential for California red-legged frog to occur within the treatment areas in addition to measures to reduce adverse effects.

The potential for treatment activities and maintenance treatments to result in adverse effects to California red-legged frog were examined in the PEIR, and through the implementation of the above measures, impacts to this species associated with the project will be less than significant and are consistent with those examined in the PEIR.

Other Special Status Amphibians

In addition to California red-legged frog, suitable habitat for three other special status amphibians is present within the treatment areas: California giant salamander (*Dicamptodon ensatus*), foothill yellow-legged frog – north coast DPS (*Rana boylei* pop 1), and red-bellied newt (*Taricha rivularis*). Suitable breeding habitat for these species is present within streams in the treatment areas, and suitable upland dispersal and aestivation habitat is present in the adjacent upland habitats these species may utilize spaces under logs, bark, rocks, and other large objects for shade or refuge. Foothill yellow-legged frog and red-bellied newt were observed during the site visit by Nomad biologists and there are two CNDDB records for California giant salamander in creeks inside the treatment areas.

In accordance with SPR BIO-1, no mitigation would be required for California giant salamander, foothill yellow-legged frog, and red-bellied newt if it is determined that adverse effects to these species can be avoided by physically avoiding suitable habitat. The treatment areas exclude aquatic features such as streams and riparian habitats potentially used by special status amphibians in accordance with SPR HYD-4. Aquatic habitat function for these species would be maintained by the implementation of WLPZs per SPR HYD-4 and measures specified by SPR BIO-4, including that only hand application of herbicides approved for use in aquatic environments will be allowed in riparian habitat and only during low-flow periods or when seasonal streams are dry.

California giant salamander, foothill yellow-legged frog, and red-bellied newt also use upland habitats near aquatic features for migration and aestivation and therefore may be present outside of the 50-to-150-foot WLPZs created adjacent to all aquatic habitat within the treatment areas by the implementation of SPR HYD-4. Therefore, the treatment areas for this project potentially overlaps habitat used by these species and the total avoidance of suitable habitat for special status amphibians is not possible.

In accordance with SPR BIO-10, a qualified RPF or biologist should conduct focused or protocol-level surveys for special status amphibians within suitable habitat potentially used by California giant salamander, foothill yellow-legged frog, and red-bellied newt. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. However, as stated in SPR BIO-10, if presence of California giant salamander, foothill yellow-legged frog, or red-bellied newt is assumed, then focused or protocol surveys may not be required.

If special status amphibians are not detected, then no further mitigation for these species would be required. If special status amphibians are observed during focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the observed species by implementing Mitigation Measure BIO-2b. Under Mitigation Measure BIO-2b, the project proponent will minimize adverse effects to the observed species and avoid mortality, injury, or disturbance to individuals by (for all treatment activities except prescribed burning) establishing a no-disturbance buffer around occupied sites.

Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance. Buffers will generally be a minimum of 100 feet unless site conditions indicate a smaller buffer would be sufficient for protection. 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 site is no longer occupied, or that 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 occupied site during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment

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activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury, or disturbance to special-status species.

For prescribed burning, the project proponent will implement the treatment outside the sensitive period of California giant salamander, foothill yellow-legged frog, and red-bellied newt life histories (e.g., outside the breeding season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. The biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance to special status amphibians. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.

For all treatment activities, the project proponent will design treatment activities to maintain the habitat function. 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 of special status amphibians. 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 special status amphibians. Identification and treatment of these features will be based on the life histories of California giant salamander, foothill yellow-legged frog, and red-bellied newt and habitat requirements of these species and the most current, commonly accepted science. A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function.

A qualified RPF or biologist with knowledge of special status amphibian habitats and life histories 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 for special status amphibians because the loss of special status amphibians would substantially reduce the number or restrict the range of these species. If the project proponent determines the impact on special status amphibians would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special status amphibians 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.

If the project proponent cannot avoid mortality, injury or disturbance to California giant salamander, foothill yellow-legged frog, or red-bellied newt then the project proponent will implement Mitigation Measure BIO-2c as described above for California red-legged frog.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that special status amphibians would benefit from treatment in the occupied habitat area even though some individuals of the species named above may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status wildlife not federally or state-listed (including California Fully Protected 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 similar treatment. If it is determined that treatment activities would be beneficial to special status amphibian, 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.

In addition to the above measures, crew members and contractors will receive training regarding biological resources from a qualified RPF or biologist under SPR BIO-2 as described above for California red-legged frog.

Northwestern Pond Turtle (*Emys marmorata*)

The northwestern pond turtle is a habitat generalist and has been observed in slow-moving rivers and streams (e.g., in oxbows), lakes, reservoirs, permanent and ephemeral wetlands, stock basins, and sewage treatment plants. This species prefers aquatic habitat with refugia such as undercut banks and submerged vegetation (Holland 1994), and require emergent basking sites such as mud banks, rocks, logs, and root wads to thermoregulate their body

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temperature (Holland 1994, Bash 1999). Suitable aquatic habitat for this species is present in streams throughout the treatment areas, and they may nest in open grasslands or sparsely vegetated areas near streams anywhere within the treatment areas. The nearest CNDDDB occurrence of the species (EONDX #42860) was recorded within the treatment areas in 1998, in Little Sulphur Creek near the northern border of the treatment areas.

In accordance with SPR BIO-1, no mitigation would be required for northwestern pond turtle if it is determined that adverse effects to northwestern pond turtle can be avoided by physically avoiding suitable habitat. The treatment areas exclude aquatic features such as ponds potentially used by northwestern pond turtle in accordance with SPR HYD-4. Aquatic habitat function for northwestern pond turtle would be maintained by the implementation of WLPZs per SPR HYD-4 and measures specified by SPR BIO-4, including that only hand application of herbicides approved for use in aquatic environments will be allowed in riparian habitat, and only during low-flow periods or when seasonal streams are dry. In accordance with SPR BIO-2, crew members and contractors will receive training regarding biological resources including northwestern pond turtle from a qualified RPF or biologist familiar with the life history of northwestern pond turtle.

Northwestern pond turtles regularly utilize upland terrestrial habitats, most often during the summer and winter, especially for oviposition (females), overwintering, seasonal terrestrial habitat use, and overland dispersal (Holland 1994). Northwestern pond turtle may be present up to 1,640 feet from suitable aquatic habitat (Reese and Welsh 1997), and even with the implementation of SPR HYD-4, which would establish WLPZs ranging from 50 to 150 feet adjacent to all aquatic habitat within the treatment areas, total avoidance of suitable upland habitat for northwestern pond turtle is not possible.

In accordance with SPR BIO-10, a qualified RPF or biologist should conduct focused or protocol-level surveys for northwestern pond turtle within suitable habitat prior to treatment. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. However, as stated in SPR BIO-10, if presence of northwestern pond turtle is assumed, then focused or protocol surveys may not be required.

If northwestern pond turtle is not detected, then no further mitigation for the species would be required. If northwestern pond turtle is observed during focused or protocol-level surveys or assumed present, then Mitigation Measure BIO-2a and treatments will avoid occupied habitat, as northwestern pond turtle eggs and young can remain in nests year-round. If a northwestern pond turtle is discovered during treatment, all work would cease, and the individual would be left to leave on its own volition and the situation would be further assessed in conjunction with a qualified biologist. If the turtle will not or cannot leave on its own, a USFWS- and CDFW- approved and permitted biologist will be contacted to relocate the turtle outside of the treatment areas. If the project proponent cannot avoid mortality, injury or disturbance to northwestern pond turtle, then the project proponent will implement Mitigation Measure BIO-2c.

In accordance with SPR BIO-2, crew members and contractors will receive training regarding biological resources from a qualified RPF or biologist familiar with the life history of northwestern pond turtle, so crews are aware of potential for northwestern pond turtle to occur within the treatment areas in addition to measures to reduce adverse effects.

Special Status Birds

The treatment areas contain potential suitable nesting habitat for five species of special status birds: golden eagle (*Aquila chrysaetos*), white-tailed kite (*Elanus leucurus*), American peregrine falcon (*Falco peregrinus anatum*), sharp-shinned hawk (*Accipiter striatus*), and purple martin (*Progne subis*). Tall trees throughout the treatment areas may provide suitable nesting habitat for golden eagle, white-tailed kite, and purple martin. Woodlands in the treatment areas may provide suitable nesting habitat for sharp-shinned hawk. Potentially suitable nesting habitat for golden eagle and American peregrine falcon is present in the steep cliffs adjacent to the treatment areas. In addition to suitable nesting habitat, the above species may forage within the treatment areas.

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The proposed project (prescribed burning, mechanical treatment, and manual treatment) may have potential adverse effects on nesting special-status birds through noise and physical disturbance by flames, smoke, heavy machinery, vehicles, construction activities, increased human presence, and removal of vegetation. This may result in short-term impacts such as failure to breed, nest abandonment, reduced fecundity and decreased survivorship or alter behavior in ways that result in injury, mortality and reduced foraging success. The potential for treatment activities, including maintenance treatments, to result in adverse effects on special-status birds was examined in the PEIR.

In accordance with SPR BIO-10, if work takes place outside of the nesting season (February 1 to August 31), no further mitigation for special-status birds is necessary. If work outside the nesting season is not possible, nesting surveys by a qualified biologist would be required, following established protocols. If active special-status bird species nests are discovered during surveys, Mitigation Measure BIO-2b would be put into effect and a 100-ft no-disturbance buffer would be established around occupied nests for species not federally or state-listed (including California Fully Protected Species). This would include sharp-shinned hawk and purple martin.

For golden eagle, white-tailed kite, and American peregrine falcon, Mitigation Measure BIO-2a would be put into effect, and a 500-ft no-disturbance buffer would be established around occupied nests. No mechanical or manual treatment would occur within these established buffers until the nest is determined to be unoccupied by a qualified RPF or biologist. To maintain habitat function for these species trees or snags greater than 8 inches DBH will not be removed unless prescription is created by an RPF. With the exceptions of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road. For golden eagle and white-tailed kite, which may utilize large trees within grassland habitat for nesting, habitat function will be maintained through the prevention of conversion of grassland to forested habitat.

Pursuant to Mitigation Measure BIO-2a, this determination for golden eagle, white-tailed kite, and American peregrine falcon must be made in consultation with CDFW to ensure that appropriate avoidance, minimization, and/or mitigation measures are implemented for this project to avoid take of this species if work cannot be completed outside the nesting season. Therefore, if Mitigation Measure BIO-2a is required for maintenance or treatment activities, CDFW would be contacted for input on the determination that habitat function would be maintained for golden eagle, white-tailed kite, and American peregrine falcon. CDFW can be contacted at R3Timber@wildlife.ca.gov for a consultation request. To maintain habitat function for other special-status birds and common nesting birds, trees or snags greater than 8 inches DBH will not be removed unless prescription is created by an RPF to preserve nesting habitat provided by more mature trees, except in the cases stated above. This would also maintain habitat for canopy-nesting avian species per SPR BIO-12.

Special Status Bats

Five special status bat species have the potential to occur within the treatment areas based on range, habitat, and recorded occurrences in the region: pallid bat (*Antrozous pallidus*), hoary bat (*Lasiurus cinerus*), western red bat (*Lasiurus frantzii*), long-eared myotis (*Myotis evotis*), and fringed myotis (*Myotis thysanodes*). These bat species may occur in any habitat within the treatment areas, however, large trees, snags, caves, rock crevices, mines, and relatively undisturbed parts of human-made structures are generally the most suitable roost locations. Trees throughout the treatment areas may provide habitat for all the above bat species in the form of exfoliating bark, hollows, and snags. The proposed project (prescribed burning, mechanical treatment, and manual treatment) may have potential adverse effects on roosting special status bat species through fire, smoke, noise, physical disturbance by heavy machinery, vehicles, construction activities, increased human presence, and the loss of roosting habitat by the removal of trees. This may result in the permanent removal of roost features and displacement of individual bats utilizing them. The potential for treatment activities to result in adverse effects on special-status bats was examined in the PEIR.

If work activity is to occur during the bat maternity season (April 1 to December 31), focused surveys for roosting bats would be conducted throughout suitable habitat before the start of work, per SPR BIO-10. If special status bat roosts are discovered as a result of focused surveys, Mitigation Measure Bio-5 would be put into effect and an appropriately sized no-disturbance buffer would be established around active bat roosts within which no prescribed burning, mechanical or manual treatment would occur. To maintain habitat function for special-status bat species, trees or snags greater than 8 inches dbh will not be removed unless prescription is created by an RPF to preserve roosting

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habitat provided by larger and more mature trees with the exception of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road. Through the implementation of these measures, impacts to special-status bat species associated with the project will be less than significant and are consistent with those examined in the PEIR.

Northern California Ringtail (*Bassariscus astutus raptor*)

The treatment areas include woodlands, riparian zones, and rocky areas potentially suitable as ringtail denning and foraging habitat. Although CNDDD does not track ringtail, this species was observed using a camera station in the treatment areas as recently as 2021.

The proposed treatments (prescribed burning, mechanical treatment, and manual treatment) may have potential adverse effects on ringtail through fire, smoke, noise, physical disturbance by heavy machinery, vehicles, construction activities, increased human presence, and the loss of denning and foraging habitat. This may result in the destruction of potential denning sites, temporary reduction in the amount of prey, and displacement of individual ringtail. The potential for treatment activities to result in adverse effects on ringtail was examined in the PEIR.

If work activity is to occur during the spring denning season focused surveys for ringtail dens would be conducted throughout suitable habitat before the start of work, per SPR BIO-10. If ringtail dens are discovered as a result of focused surveys, Mitigation Measure Bio-2a would be put into effect to avoid mortality, injury, or disturbance to individuals. 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. Therefore, 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. To maintain habitat function for this den-dwelling species, trees or snags greater than 8 inches dbh will not be removed unless prescription is created by an RPF to preserve denning habitat provided by larger and more mature trees with the exception of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road.

North American porcupine (*Erethizon dorsatum*)

The treatment area includes woodlands and shrubland potentially suitable as North American porcupine denning and foraging habitat.

The proposed treatments (prescribed burning, mechanical treatment, and manual treatment) may have potential adverse effects on fisher through fire, smoke, noise, physical disturbance by heavy machinery, vehicles, construction activities, increased human presence, and the loss of denning and foraging habitat. This may result in the destruction of potential denning sites, temporary reduction in the amount of prey, and displacement of individual porcupine. The potential for treatment activities to result in adverse effects on fisher was examined in the PEIR.

If work activity is to occur during the denning season (February to August), focused surveys for porcupine dens would be conducted throughout suitable habitat before the start of work, per SPR BIO-10. If porcupine dens are discovered as a result of focused surveys, Mitigation Measure Bio-2b would be put into effect and an appropriately sized no-disturbance buffer would be established around active porcupine dens within which no prescribed burning, mechanical or manual treatment would occur. To maintain habitat function for this den-dwelling species, trees or snags greater than 8 inches dbh will not be removed unless prescription is created by an RPF to preserve denning habitat provided by larger and more mature trees with the exception of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road. Through the implementation of these measures, impacts to North American porcupine associated with the project will be less than significant and are consistent with those examined in the PEIR.

Fisher (*Pekania pennanti*)

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The treatment area includes woodlands potentially suitable as fisher denning and foraging habitat. The nearest CNDDDB occurrence was recorded on a camera station in 2013 in a mountainous area approximately 1.1 miles east of the treatment areas.

The proposed treatments (prescribed burning, mechanical treatment, and manual treatment) may have potential adverse effects on fisher through fire, smoke, noise, physical disturbance by heavy machinery, vehicles, construction activities, increased human presence, and the loss of denning and foraging habitat. This may result in the destruction of potential denning sites, temporary reduction in the amount of prey, and displacement of individual fishers. The potential for treatment activities to result in adverse effects on fisher was examined in the PEIR.

If work activity is to occur during the denning season (February to August), focused surveys for fisher dens would be conducted throughout suitable habitat before the start of work, per SPR BIO-10. If fisher dens are discovered as a result of focused surveys, Mitigation Measure Bio-2b would be put into effect and an appropriately sized no-disturbance buffer would be established around active fisher dens within which no prescribed burning, mechanical or manual treatment would occur. To maintain habitat function for this den-dwelling species, trees or snags greater than 8 inches dbh will not be removed unless prescription is created by an RPF to preserve denning habitat provided by larger and more mature trees with the exception of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road. Through the implementation of these measures, impacts to fisher associated with the project will be less than significant and are consistent with those examined in the PEIR.

American Badger (*Taxidea taxus*)

The treatment areas include grassland habitat which is potentially suitable for American badger. Although American badger is rare in this region, individual badgers range widely and could potentially use the treatment areas. The nearest CNDDDB occurrence was recorded in 2011 at Pepperwood Preserve, approximately 7.9 miles south of the treatment areas. This occurrence notes that badger presence was not actually confirmed at this location, but that several apparent badger burrows were detected.

The proposed project (prescribed burning, mechanical treatment, and manual treatment) may have potential adverse effects on American badger through fire, smoke, noise, physical disturbance by heavy machinery, vehicles, construction activities, increased human presence, and the loss of denning and foraging habitat by soil compaction and a potentially reduced number of small mammal prey items. This may result in the destruction of burrows, temporary reduction in the amount of prey, and displacement of individual badgers. The potential for treatment activities to result in adverse effects on American badger was examined in the PEIR.

If work activity is to occur during the denning season (March to August), focused surveys for badger dens would be conducted throughout suitable habitat before project initiation, per SPR BIO-10. If American badger dens are discovered as a result of focused surveys, Mitigation Measure Bio-2b would be put into effect and an appropriately sized no-disturbance buffer would be established around active American badger dens within which no prescribed burning, mechanical or manual treatment would occur. To maintain habitat function and retain potential denning sites for American badgers, existing burrows greater than 6 inches in diameter will not be disturbed during treatment to preserve denning habitat. Per SPR BIO-11, if temporary fencing is required for prescribed herbivory, a wildlife-friendly design will be used to minimize risk to dispersing American badger. If an American badger is discovered during treatment, all work would cease, and the individual would be left to leave on its own volition and the situation would be further assessed in conjunction with a qualified biologist. Through the implementation of these measures, impacts to American badger associated with the project will be less than significant and are consistent with those examined in the PEIR.

Conclusion

The potential for treatment activities to result in adverse effects on special-status wildlife was examined in the PEIR. Potential impacts to special-status wildlife due to the treatments associated with the project are consistent in scope and intensity with those in the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR. Special-status wildlife species with potential to be adversely affected were considered in the PEIR. SPRs applicable to this impact are BIO-1, BIO-2, BIO-9, BIO-10, BIO-11, BIO-12, GEO-1, GEO-2, HYD-4, and HYD-

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5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-3

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on sensitive habitats, including those designated as a Sensitive Natural Community (SNC). Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. The potential for treatment activities, including maintenance treatments, to result in adverse effects on sensitive habitats was examined in the PEIR.

Potentially Occurring SNC

Review of relevant data resources and expertise with local flora identified a total of 36 potentially occurring SNC in the treatment areas, including 18 herbaceous communities, six shrubland communities, and 12 forest and/or woodland communities, listed below.

Table 3.7-4: Sensitive Natural Communities Present or Potentially Occurring in the Treatment Areas

SENSITIVE NATURAL COMMUNITY	RARITY RANK	OCCURRENCE POTENTIAL
HERBACEOUS COMMUNITIES		
Ashy ryegrass - Creeping wildrye turfs <i>Leymus cinereus</i> - <i>Leymus triticoides</i>	S3	Possible
Bushy spikemoss mats <i>Selaginella (bigelovii, wallacei)</i>	S3	Possible
California brome - blue wildrye prairie <i>Bromus carinatus</i> - <i>Elymus glaucus</i>	S3	Possible
Coast Range stonecrop draperies <i>Sedum spathulifolium</i>	S3	Possible
Coastal tufted hair grass - Meadow barley - California oatgrass meadow <i>Deschampsia cespitosa</i> - <i>Hordeum brachyantherum</i> - <i>Danthonia californica</i>	S3	Possible
Common monkey flower - thistle - hedgenettle seeps <i>Mimulus guttatus</i> - <i>Cirsium</i> spp. - <i>Stachys</i> spp.	S3	Possible
Floating mats of weak manna grass <i>Torreyochloa pallida</i>	S3?	Possible
Goldenaster patches <i>Heterotheca (oregona, sessiliflora)</i>	S3	Possible
Hardstem and California bulrush marshes <i>Schoenoplectus (acutus, californicus)</i>	S3S4	Possible
Idaho fescue - California oatgrass grassland <i>Festuca idahoensis</i> - <i>Danthonia californica</i>	S3	Possible
Iris-leaf rush seeps <i>Juncus (oxymetris, xiphioides)</i>	S2?	Possible
Needle grass - Melic grass grassland <i>Nassella</i> spp. - <i>Melica</i> spp.	S3S4	Possible
Northwest manna grass marshes <i>Glyceria xoccidentalis</i>	S3?	Possible

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SENSITIVE NATURAL COMMUNITY	RARITY RANK	OCCURRENCE POTENTIAL
Onion - twistflower - dwarf-flax serpentine rock outcrop <i>Allium</i> spp. - <i>Streptanthus</i> spp. - <i>Hesperolinon</i> spp. Serpentine	S2S3	Present
Quillwort beds <i>Isoetes</i> (<i>bolanderi</i> , <i>echinospora</i> , <i>howellii</i> , <i>nuttallii</i> , <i>occidentalis</i>)	S3?	Possible
Smooth goldfields - pale spike rush vernal pool bottoms <i>Lasthenia glaberrima</i> - <i>Eleocharis</i> <i>macrostachya</i>	S2	Possible
Soft and western rush - Sedge marshes <i>Juncus</i> (<i>effusus</i> , <i>patens</i>) - <i>Carex</i> (<i>pansa</i> , <i>praegracilis</i>)	S3S4	Possible
Torrent sedge patches <i>Carex nudata</i>	S3	Possible
SHRUBLAND COMMUNITIES		
Bush monkeyflower scrub <i>Diplacus aurantiacus</i>	S3?	Possible
California coffeeberry - western azalea scrub - Brewer's willow <i>Frangula californica</i> - <i>Rhododendron</i> <i>occidentale</i> - <i>Salix breweri</i>	S3	Possible
Canyon live oak - Interior live oak chaparral <i>Quercus wislizeni</i> - <i>Quercus chrysolepis</i> (shrub)	S3S4	Present
Eastwood manzanita chaparral <i>Arctostaphylos glandulosa</i>	S3	Present
Hairy leaf - woolly leaf ceanothus chaparral <i>Ceanothus</i> (<i>oliganthus</i> , <i>tomentosus</i>)	S3	Possible
Hoary, common, and Stanford manzanita chaparral <i>Arctostaphylos</i> (<i>canescens</i> , <i>manzanita</i> , <i>stanfordiana</i>)	S3	Present
FOREST AND/OR WOODLAND COMMUNITIES		
Bigleaf maple forest and woodland <i>Acer macrophyllum</i>	S3	Possible
Box-elder forest and woodland <i>Acer negundo</i>	S3	Possible
California bay forest and woodland <i>Umbellularia californica</i>	S3	Present
California buckeye groves <i>Aesculus californica</i>	S3	Possible
Fremont cottonwood forest and woodland <i>Populus fremontii</i> - <i>Fraxinus velutina</i> - <i>Salix gooddingii</i>	S3.2	Possible
Goodding's willow - red willow riparian woodland and forest <i>Salix gooddingii</i> - <i>Salix laevigata</i>	S3	Possible

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SENSITIVE NATURAL COMMUNITY	RARITY RANK	OCCURRENCE POTENTIAL
Oregon ash groves <i>Fraxinus latifolia</i>	S3.2	Possible
Oregon white oak woodland and forest <i>Quercus garryana</i> (tree)	S3	Present
Tanoak forest <i>Notholithocarpus densiflorus</i>	S3.2	Possible
Ultramafic cypress woodland <i>Hesperocyparis (sargentii, macnabiana)</i>	S3	Present
Valley oak riparian forest and woodland <i>Quercus lobata</i> Riparian	S3	Possible
Valley oak woodland and forest <i>Quercus lobata</i>	S3	Present

Project-Specific Analysis and Addendum

Assessment and Findings

During the reconnaissance-level survey pursuant to SPR BIO-1, madrone (*Arbutus menziesii*), Douglas fir (*Pseudotsuga menziesii*), California bay (*Umbellularia californica*), valley oak (*Quercus lobata*), coast live oak (*Quercus agrifolia*), and foothill pine (*Pinus sabiniana*) were observed in the treatment areas, as were some serpentine outcrops and seeps. Where observed in the portion of the treatment areas surveyed, Douglas fir and coast live oak – California bay are likely present in high enough cover and in large enough patches to qualify as SNC. Characteristic species of most of the remaining SNC were observed in the portion of the treatment areas visited during reconnaissance-level surveys, and suitable habitat is present and these species could occur in the treatment areas and may be present in concentrations and assemblages that meet the defined membership rules to qualify as a SNC. Additionally, oak woodland may be present in the treatment areas, which are considered sensitive habitats and require similar treatment as SNC. While characteristic species of the remaining SNC were not observed in the portion of the treatment areas visited during reconnaissance-level surveys, suitable habitat is present and these species could occur in the treatment areas and may be present in concentrations and assemblages that meet the defined membership rules to qualify as a SNC.

Based on the identification of potential SNCs occurring within the treatment areas by a qualified biologist as required by SPR BIO-3, the following SNCs may be present within grassland habitats in the treatment areas: Ashy ryegrass - creeping wildrye turfs, bushy spikemoss mats, California brome - blue wildrye prairie, Coast Range stonecrop draperies, coastal tufted hair grass - meadow barley - California oatgrass meadow, common monkey flower - thistle - hedgenettle seeps, floating mats of weak manna grass, goldenaster patches, hardstem and California bulrush marshes, Idaho fescue - California oatgrass grassland, iris-leaf rush seeps, needle grass - Melic grass grassland, northwest manna grass marshes, onion - twistflower - dwarf-flax serpentinite rock outcrop, quillwort beds, smooth goldfields - pale spike rush vernal pool bottoms, soft and western rush - sedge marshes, torrent sedge patches. Based on the same analysis, the following SNCs may be present in shrubland habitats: bush monkeyflower scrub, California coffeeberry - western azalea scrub - Brewer's willow, canyon live oak - interior live oak chaparral, Eastwood manzanita chaparral, hairy leaf - woolly leaf ceanothus chaparral, hoary, common, and Stanford manzanita chaparral. Similarly, the following SNCs may be present in forest and woodland habitats: Bigleaf maple forest and woodland, box-elder forest and woodland, California bay forest and woodland, California buckeye groves, Fremont cottonwood forest and woodland, Goodding's willow - red willow riparian woodland and forest, Oregon ash groves. Additionally, riparian habitat, chaparral habitat, and oak woodland present in the treatment areas, whether part of a SNC or otherwise, are considered sensitive habitats and require similar treatment as SNCs.

Conclusion

Pursuant to SPR BIO-3, a qualified biologist would conduct a survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" prior to the start of treatment activities (CDFW 2018). Because other sensitive natural communities may be present in addition to those described above and in table 3.7-4, sensitive natural communities and oak woodlands within the treatment areas would be mapped by a qualified biologist or botanist during this survey, as required under SPR BIO-3.

After mapping required by SPR BIO-3, WLPZs would then be established around riparian habitat and other aquatic habitat per SPR HYD-4. Adjacent to all Class I and Class II streams within the treatment areas, WLPZs established would range from 50 to 150 feet wide and would be of sufficient size to avoid degradation of downstream beneficial uses of water adjacent to Class III streams. In addition, SPR BIO-4 requires that treatments in riparian habitats retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation. Treatments in riparian habitat would also be limited to removal of uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants), and the project

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proponent is required to notify CDFW prior to any treatments in riparian habitat. SPR-BIO-4 also stipulates that in riparian habitat, 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.

Project activities would occur in a manner that retains vegetation types with characteristics qualifying as SNC or oak woodlands to the extent possible. If impacts to SNCs or oak woodlands cannot be avoided, Mitigation Measure BIO-3a would apply in these areas. Under Mitigation Measure BIO-3a, treatment actions would be done in a manner that restores natural fire regimes as defined in the *Manual of California Vegetation*, Appendix 2, Table A2 (Sawyer et al. 2009), or return vegetation composition and structure to their natural condition; no fuel breaks would be created in SNC with rarity ranks of S1 (critically imperiled) or S2 (imperiled); to the extent possible, fuel breaks will not remove more than 20% relative cover of native vegetation; and only shaded fuel breaks would be created in oak woodlands. Under Mitigation Measure Bio-3a, prescribed herbivory will be timed to occur when non-target vegetation is not susceptible to damage as 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.

If habitat function of affected SNCs or oak woodlands cannot be maintained through implementation of Mitigation Measure BIO-3a, then implementation of Mitigation Measure BIO-3b would be required, and unavoidable losses of these resources would be compensated for through restoration or preservation of these vegetation types within or outside of the treatment areas.

This potential impact on sensitive habitats is within the scope of the PEIR because the affected sensitive natural communities and oak woodlands were analyzed in the PEIR, and the treatment activities and intensity of disturbance as a result of implementing vegetation treatments and maintenance treatments are consistent with those analyzed in the PEIR. SPRs applicable to this impact are BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, HAZ-1, HAZ-5, HAZ-6, HYD-4, and HYD-5. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-4

Assessment and Findings

Review and survey of project-specific biological resources as part of SPR BIO-1, has determined that the treatment areas contain segments of perennial, intermittent, and ephemeral streams that could be protected under federal and/or state government jurisdiction. Streams within the treatment areas include the perennial streams McDonnell Creek, Little Sulphur Creek, and several other intermittent creeks and tributaries. Ingalls Creek also runs along the southeastern border of the treatment areas.

Adjacent to all Class I and Class II streams within the treatment areas, WLPZs ranging from 50 to 150 feet would be established per SPR HYD-4. Adjacent to all Class III streams, WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established. In addition, SPR HYD-4 will establish no-disturbance buffers of 300 feet around all ponds and pools within the treatment areas. All aquatic habitat within WLPZs will therefore be avoided by manual, mechanical, herbicide, and pile burning treatments.

Other seasonal wetlands, springs, and seeps may also be present in the treatment areas, the precise locations of which may have not been mapped or demarcated in the field. Under Mitigation Measure BIO-4, a qualified RPF or biologist would delineate the boundaries of these features, establish an appropriate buffer (25 feet minimum), and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). Mitigation Measure BIO-4 also allows for

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broadcast burning within delineated buffers if a qualified RPF or biologist determines that no special-status species are present in the wetland habitat, wetland habitat function would be maintained, and that the broadcast burn is within the normal fire return interval for the wetland vegetation types present. No fire ignition (nor associated use of accelerants) will occur within buffers or WLPZs.

Conclusion

The potential impact on state or federally protected wetlands within the treatment areas is within the scope of the PEIR and are consistent with and would not constitute a substantially more significant impact than those considered in the PEIR. This determination applies to initial vegetation and maintenance treatments, as initial treatments and maintenance treatments involve the same treatment activities. Biological resource SPRs that apply to project impacts under Impact BIO-4 are BIO-1, BIO-2, BIO-3, BIO-9, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, HYD-1, HYD-4, HAZ-5, HAZ-6, HYD-1, HYD-4, and HYD-5.

Impact BIO-5

Assessment and Findings

Habitat loss, fragmentation, and degradation resulting from land use changes or habitat conversion can alter the use and viability of wildlife movement corridors (*i.e.*, linear habitats that naturally connect and provide passage between two or more otherwise disjunct larger habitats or habitat fragments). In general, studies suggest that habitat corridors provide connectivity for and are used by wildlife, and as such, are an important conservation tool (Beier and Noss 1998). According to Beier and Loe (1992), wildlife habitat corridors should fulfill several functions. They should maintain connectivity for daily movement, travel, mate-seeking, and migration; plant propagation; genetic interchange; population movement in response to environmental change or natural disaster; and recolonization of habitats subject to local extirpation.

The suitability of a habitat as a wildlife movement corridor is related to, among other factors, the habitat corridor's dimensions (length and width), topography, vegetation, exposure to human influence, and the species in question (Beier and Loe 1992). Species utilize movement corridors in several ways. "Passage species" are those species that use corridors as thru-ways between outlying habitats. The habitat requirements for passage species are generally less than those for corridor dwellers. Passage species use corridors for brief durations, such as for seasonal migrations or movement within a home range. As such, movement corridors do not necessarily have to meet any of the habitat requirements necessary for a passage species' everyday survival. Large herbivores, such as deer, and medium-to-large carnivores, such as coyotes, bobcats and mountain lions, are typically passage species. "Corridor dwellers" are those species that have limited dispersal capabilities – a category that includes most plants, insects, reptiles, amphibians, small mammals, and birds – and that use corridors for a greater length of time. As such, wildlife movement corridors must fulfill key habitat components specific to a species' life history requirements in order for them to survive (Beier and Loe 1992). In general, however, the suitability and/or utility of the landscape – specifically, of the landscape as corridor habitat – is best evaluated on a species-level (Beier and Noss 1998).

According to the habitat modeling by the CDFW's Terrestrial Connectivity Data and Resources Branch, Modini Ranch includes Areas of Conservation Emphasis (ACE) 2.5 sq/mile hexagons labeled as "Irreplaceable and Essential Corridors" (Hexagon IDs: 21705, 21778).

Areas designated as "Irreplaceable and Essential Corridors" have been identified as "areas where surrounding land use and barriers are expected to funnel, or concentrate, animal movement. Channelized areas may represent the last available connections between two areas, making them high priority for conservation". Areas designated as "Large Natural Habitat Areas" are described as "large blocks of natural habitat (>2000 acres) where connectivity is generally intact". Furthermore, the reconnaissance survey conducted in fulfillment of SPR BIO-1 has determined that habitat within the treatment areas is suitable for use as a wildlife

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movement corridor. Habitat within the treatment areas also has potential to contain wildlife nurseries sites, including known rookeries. The treatment areas also contain riparian corridor habitat along creeks.

Conclusion:

The potential for treatment activities to result in direct or indirect effects on wildlife movement corridors and nursery sites was examined in the PEIR. Treatments for the proposed project may have a temporary effect on wildlife movement during treatments due to disturbance from heavy equipment and elevated levels of human activity, but due to the relatively small footprint of the treatment areas and the nature of the proposed treatment activities, existing functionality as a wildlife movement corridor (or potential nursery site) will be retained, as habitat will not be altered on a landscape scale and no barriers to movement will be introduced as a result of treatment. Wildlife would be able to continue utilizing the treatment areas for movement immediately after treatments are complete, and furthermore, the mechanical and manual clearing of brush would likely promote increased use of the treatment areas by improving habitat and increasing wildfire resilience. Habitat function would also be retained as trees and snags with a DBH greater than 8 inches will not be removed during treatment with the exception of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road. Potential direct or indirect effects on wildlife nurseries and the functionality of the treatment areas as a wildlife movement corridor due to treatments associated with the project are consistent with and within the scope of those examined in the PEIR because the treatment activities and intensity of disturbance as a result of implementing vegetation treatments and maintenance treatments are consistent with those analyzed in the PEIR. SPRs applicable to this impact are BIO-1, BIO-2, BIO-4, BIO-10, and HYD-4. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact BIO-6

Assessment and Findings

Habitat suitable for nesting birds and other common wildlife species is present throughout the treatment areas. Treatments associated with the proposed project could result in direct or indirect adverse effects resulting in reduction of habitat and thus abundance of common wildlife. These impacts were examined in the PEIR. For any bird species that are nesting within the treatment areas, noise and movement of personnel and equipment that exceeds normal background conditions within the treatment areas could result in short-term impacts such as failure to breed, nest abandonment, reduced fecundity and decreased survivorship. Continuous or persistent disturbance may alter the bird's behavior in ways that result in injury, mortality and reduced foraging success, such as the temporary loss of habitat due to avoidance of areas that have suitable habitat but intolerable levels of disturbance.

In accordance with SPR BIO-12, if work takes place outside of the nesting season (February 1 to August 31), no further mitigation for common nesting bird species is necessary. If work activity is to occur during the nesting season, SPR BIO-12 would be implemented and focused surveys for common nesting birds would be conducted by a qualified biologist throughout suitable habitat before the start of treatment activities. If no active nests are observed, then no further mitigation would be necessary; however, if active nests, i.e., nests with eggs or young present, are found within the treatment areas, non-disturbance buffers will be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the nesting pair's tolerance to disturbance, and the type/duration of potential disturbance. No work would occur within the non-disturbance buffers until the young have fledged as determined by a qualified biologist.

Most wildlife species will be able to leave the project site on their own once work starts and therefore should not be adversely affected during the proposed treatments. There is a chance that less mobile species that

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reside in leaf litter, such as California slender salamander, could be impacted during treatments, but such species are relatively abundant, and their individual loss would not be considered significant.

Conclusion

The potential for adverse effects on common wildlife, including nesting birds, was examined within the PEIR. The extent and duration of treatments associated within the proposed project are within the scope of those covered in the PEIR because the treatment activities and intensity of disturbance from implementing vegetation treatments and maintenance treatments are consistent with those analyzed in the PEIR. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, BIO-11, and BIO-12. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than those covered in the PEIR.

Impact BIO-7

Assessment and Findings

Three local ordinances relevant to biological resources were identified and analyzed for possible conflicts with the project: the Sonoma County Tree Protection Ordinance, the Sonoma County Heritage or Landmark Tree Ordinance, and the California Oak Woodlands Preservation Act.

Sonoma County Tree Protection Ordinance:

The Sonoma County Tree Protection Ordinance protects trees greater than 9 inches dbh from being removed as part of development projects in unincorporated areas of Sonoma County and requires that development projects submit site plans depicting all trees protected by the act (Sonoma County 1989).

Sonoma County Heritage and Landmark Tree Ordinance:

The Sonoma County Heritage and Landmark Tree Ordinance requires permits for the removal of designated heritage or landmark trees in unincorporated areas of Sonoma County. Trees or groves of trees are designated by the Sonoma County board of supervisors on the basis of historical interest, significance, or unique characteristics such as size, age, rarity, shape, or location (Sonoma County 1986). Exemptions for this ordinance include activities considered Stewardship and Forest Management Activities, Activities described in this PSA are consistent with these exceptions, thus no permits are required.

California Oak Woodlands Preservation Act

The California Oak Woodlands Preservation Act provides legal protection for the state's oak woodlands for all California Environmental Quality Act (CEQA) processes within a county's jurisdiction. Under the California Oak Woodlands Preservation Act, if impacts to oak woodlands (defined as habitat with >10% canopy cover comprised of native *Quercus* trees with a diameter at breast height >5 inches) are unavoidable, a registered professional forester must perform all CEQA oak woodland characterizations and participate in determining thresholds of significance and developing site-specific mitigation measures. Alternatives available to mitigate impacts to oak woodlands include use of conservation easements to conserve oak woodlands, plant and maintain for seven years an appropriate number of trees, contribute funds to the Oak Woodlands Conservation Fund, and/or other mitigation measures developed by the county.

Conclusion

Project-Specific Analysis and Addendum

The project will not conflict with the Sonoma County Tree Protection ordinance as project activities are consistent with Stewardship and Forest Management Activities Forestry exemptions, and therefore the project proponent is not required to submit a site plan depicting all protected trees, and furthermore no trees greater than 8 inches dbh will be removed unless prescription is created by an RPF with the exception of diseased trees or those posing an immediate safety hazard and trees within the shaded fuel break along Pine Flat Road. It is also unlikely that any trees removed as part of treatments would qualify as a heritage or landmark tree under the Sonoma County Heritage and Land Mark Tree Ordinance, and furthermore this ordinance grants exemptions for removal of trees when removal is authorized by CAL FIRE or where a tree is in a hazardous, dangerous, or unhealthy condition so as to endanger life, property, or other trees. The project will not conflict with the California Oak Woodlands Preservation Act as oak woodlands are included as a sensitive habitat in the CalVTP and as such, impacts to oak woodland were analyzed and SPRs BIO-1, BIO-2, BIO-3, BIO-6, BIO-9, and Mitigation Measures BIO-3a and 3b would be implemented as stated in Impact BIO-3. Therefore, there would be no conflict with local ordinances as a result of implementation of treatment activities.

Per SPR AD-3, all treatments will be designed and implemented 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. Therefore, the potential for the project to conflict is within the scope considered in the PEIR and would not constitute a substantially more severe significant impact than was covered in the PEIR.

Impact BIO-8

Conclusion

Implementation of the proposed vegetation treatment and maintenance treatments would not result in a conflict with adopted habitat conservation plans or natural community conservation plans because the treatment areas are not within the plan area of any adopted habitat conservation plan or natural community conservation plan. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

New Biological Resource Impacts

NA

Project-Specific Analysis and Addendum

Geology, Soils, Paleontology, and Mineral Resources

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

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

New Geology, Soils, Paleontology, and Mineral Resource Impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact GEO-1

There is a potential for proposed treatment activities to cause erosion or loss of topsoil. The proposed treatment activities and associated impacts are within the scope analyzed in the PEIR. The PEIR analysis determined the impacts are less than significant. SPR's GEO 1-8, AQ-3, and AQ-4 will be implemented, if necessary, for insurance there are no significant impacts to top soil erosion. This impact is less than significant.

Impact GEO-2

While there are steep slopes within the project area the proposed treatments and their associated impacts are within the scope of that analyzed in the PEIR. SPR's AQ-3, GEO-1, GEO-3 GEO-4, GEO-7, GEO-8, will be implemented where necessary which will make the impact less than significant.

Project-Specific Analysis and Addendum

New Geology, Soils, Paleontology, and Mineral Resource Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Greenhouse Gas Emissions

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

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

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion		
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐		

Discussion

Impact GHG-1

The proposed treatment activities and their associated impacts regarding greenhouse gases are within the scope analyzed in the PEIR. In the PEIR it was found that the CalVTP is aligned with specific goals and strategies lined out in the *California Forest Carbon Plan*, the *2017 Scoping Plan*, and *Draft California 2030 Natural and Working Lands Climate Change Implementation Plan*. These impacts are less than significant. SPR GH-1 does not apply because the property is not registered as carbon offset property.

Project-Specific Analysis and Addendum

Impact GHG-2

Use of prescribed fire, mechanical equipment, and vehicles will result in greenhouse gas emissions. Proposed treatment activities and their associated impacts are within the scope of that analyzed in the PEIR. SPR AQ -3 and mitigation measure GHG-2 will be implemented to reduce the potential impacts, however, impacts to greenhouse emissions remains potentially significant and unavoidable.

New Impacts Related to GHG Emissions

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Energy Resources

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

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

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[Identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact ENG-1

Proposed treatment activities will have impacts on energy resources. The proposed treatments are within the scope analyzed in the PEIR that determined the impacts would be less than significant and unavoidable.

New Energy Resource Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Hazardous Materials, Public Health and Safety

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	LTS	Impact HAZ-1, pp. 3.10-14 – 3.10-15	Yes	HAZ-1, HAZ-4	NA	LTS	No	Yes
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	LTS	Impact HAZ-2, pp. 3.10-15 – 3.10-18	Yes	HAZ-5 through HAZ-8	NA	LTS	No	Yes
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	PS	Impact HAZ-3, pp. 3.10-18 – 3.10-19	Yes	NA	NA	HAZ-3	LTSM	Yes

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

New Hazardous Materials, Public Health and Safety Impacts: Would the treatment result in other impacts related to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion					
	<table border="1"> <thead> <tr> <th>Potentially Significant</th> <th>Less Than Significant with Mitigation Incorporated</th> <th>Less than Significant</th> </tr> </thead> <tbody> <tr> <td> ☐ </td> <td> ☐ </td> <td> ☐ </td> </tr> </tbody> </table>			Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	☐	☐
Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant						
☐	☐	☐						

Discussion

Impact HAZ-1

The Proposed treatment activities require hazardous materials such as fuels and related accelerants. The proposed treatments and their associated impacts are within the scope examined in the PEIR. The analysis in the PEIR determined that impacts are less than significant.

Impact HAZ-2

Herbicide application is proposed to control invasive weeds and woody resprouts in a limited capacity. No aerial spraying would occur. The proposed herbicide application methods and amount are within the scope

Project-Specific Analysis and Addendum

analyzed in the PEIR. With the implementation of SPR's HAZ-5 through HAZ-8 the impacts were determined to be less than significant.

Impact HAZ-3

Some of the proposed treatment activities could cause soil disturbance and potentially expose workers to hazardous materials if said materials are present on site. Mitigation measure HAZ-3 has been implemented. No known hazardous site area within the project areas based on organization records and a DTSC EnviroStor web search. This impact is less than significant.

New Hazardous Materials, Public Health and Safety Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Hydrology and Water Quality

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

Project-Specific Analysis and Addendum

Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides				HAZ-6 HAZ-7				
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	LTS	Impact HYD-5, p. 3.11-31	Yes	HYD-4 HYD-6 GEO-1 GEO-2 GEO-5	NA	LTS	No	Yes

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

New Hydrology and Water Quality Impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion					
	<table border="1"> <thead> <tr> <th>Potentially Significant</th> <th>Less Than Significant with Mitigation Incorporated</th> <th>Less than Significant</th> </tr> </thead> <tbody> <tr> <td> ☐ </td> <td> ☐ </td> <td> ☐ </td> </tr> </tbody> </table>			Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	☐	☐
Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant						
☐	☐	☐						

Discussion

Impact HYD-1

Proposed prescribed fire treatments have the potential to have adverse impacts on water quality and violate water quality standards in adjacent water ways. These potential impacts were analyzed in the PEIR for prescribed fire activities. Proposed prescribed fire treatments are within the scope of those analyzed in the PEIR. Prescribed fire treatments are designed to be low intensity. Implementation of SPR's HYD-1, HYD-4, GEO-4, GEO-6, AQ-3 will reduce the impact less than significant.

Impact HYD-2

Proposed mechanical and manual treatments have the potential to have adverse impacts on water quality and violate water quality standards in adjacent water ways. These potential impacts were analyzed in the PEIR for mechanical and manual treatment activities. All proposed mechanical and manual treatments and their associated impacts are within the scope of the PEIR. Implementation of SPR's HYD-1, HYD-2, HYD-4-6, GEO-1, GEO-2, GEO-4, GEO-5, GEO-7, GEO-8, HAZ-1, HAZ-2 will reduce the impacts to less than significant.

Impact HYD-3

Project-Specific Analysis and Addendum

Proposed prescribed herbivory treatments have the potential to have adverse impacts on water quality and violate water quality standards in adjacent water ways. These potential impacts were analyzed in the PEIR for prescribed herbivory treatment activities. All proposed prescribed herbivory treatments and their associated impacts are within the scope of the PEIR. Implementation of SPR's HYD-1, HYD-3, HYD-4, GEO-4, GEO-6 will reduce the impacts to less than significant.

Impact HYD-4

Proposed herbicide treatments have the potential to have adverse impacts on water quality and violate water quality standards in adjacent water ways. These potential impacts were analyzed in the PEIR for herbicide treatment activities. All proposed herbicide treatments and their associated impacts are within the scope of the PEIR. Implementation of SPR's HYD-1, HYD-4, HYD-5, BIO-4, HAZ-5, HAZ-6, HAZ-7 as well as applying herbicides in accordance with manufactures directions will reduce the impacts to less than significant.

Impact HYD-5

Proposed treatment activities could directly or indirectly modify existing drainage patterns by causing disturbance and erosion. Proposed treatment activities and their associated impacts are within the scope of the PEIR and analysis of these activities were determined to be less than significant if SPR's HYD-4, HYD-6, GEO-1, GEO-2, and GEO-5 are implemented.

New Hydrology and Water Quality Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Land Use and Planning, Population and Housing

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

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

New Land Use and Planning, Population and Housing Impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP PEIR?		☐ Yes	☒ No	If yes, complete row(s) below and discussion
		Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]		☐	☐	☐

Discussion

Impact LU-1

The proposed treatment activities have the potential to conflict with local land use plans, and regulations. Treatment activities and their associated impact are within the scope of the PEIR. Implementation of SPR AD-3 requires All Hands Ecology complies with local plans, policy, and ordinances. This would reduce this impact to less than significant.

Impact LU-2

NA

New Land Use and Planning, Population and Housing Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general

Project-Specific Analysis and Addendum

landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Noise

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	LTS	Impact NOI-1, pp. 3.13-9 – 3.13-12; Appendix NOI-1	No	None	NA	NA	NA	NA
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	No	None	NA	NA	NA	NA

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

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact NOI-1

No proposed treatment activities exceed the threshold of significance for this impact.

Impact NOI-2

No proposed treatment activities exceed the threshold of significance for this impact.

New Noise Impacts

NA

Project-Specific Analysis and Addendum

Recreation

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	LTS	Impact REC-1 pp. 3.14-6 – 3.14-7	No	None	NA	NA	NA	NA

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

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?		☐ Yes	☒ No	If yes, complete row(s) below and discussion
		Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]		☐	☐	☐

Discussion

Impact REC-1

No recreational areas will be impacted.

New Recreation Impacts

NA

Project-Specific Analysis and Addendum

Transportation

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact TRAN-1: Result in Temporary Traffic Operations Impacts by Conflicting with a Program, Plan, Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures	LTS	Section 3.15.2; Impact TRAN-1 pp. 3.15-9 – 3.15-10	No	NA	NA	NA	NA	NA
Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses	LTS	Impact TRAN-2 pp. 3.15-10 – 3.15-11	No	AD-3 HYD-1 TRAN-1	NA	NA	NA	NA
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	PSU	Impact TRAN-3 pp. 3.15-11 – 3.15-13		NA	AQ-1	PSU	No	Yes

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

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact TRAN-1

Proposed treatments do not have the potential to impact traffic operations.

Impact TRAN-2

Proposed treatments do not have the potential to substantially increase hazards

Impact TRAN-3

Proposed treatment activities have the potential to contribute to a net increase in VMT. Proposed treatment activities and their associated impacts are within the scope analyzed in the PEIR. Implementation of SPR AQ-1

Project-Specific Analysis and Addendum

will reduce the severity of this impact. This impact is determined to be potentially significant and unavoidable.

New Transportation Impacts

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

Project-Specific Analysis and Addendum

Public Services, Utilities and Service Systems

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Section 3.16.1 pp. 3.16-2 – 3.16-3; Impact UTIL-1 p. 3.16-9	Yes	NA	NA	LTS	No	Yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	PSU	Section 3.16.1 pp. 3.16-3 – 3.16-5; Impact UTIL-2 pp. 3.16-10 – 3.16-12	No	NA	None	NA	NA	NA
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Section 3.16.2 pp. 3.16-6 – 3.16-7; Impact UTIL-2 p. 3.16-12	No	NA	NA	NA	NA	NA

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

New Public Services, Utilities and Service System Impacts: Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact UTIL-1

Proposed prescribed fire treatments could potentially require water usage for the operational period to maintain containment and/or meet ecological objectives. This use of water would be minimal and was examined in the PEIR for its potential impact. The amount of water use anticipated has a less than significant impact.

Project-Specific Analysis and Addendum

Impact UTIL-2

Biomass generated by proposed treatment activities will not be transported off site. All biomass shall be chipped, burned or lopped and scattered on site.

Impact UTIL-3

NA

New Impacts to Public Services, Utilities and Service Systems

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

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Wildfire

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	LTS	Section 3.17.1; Impact WIL-1 pp. 3.17-14 – 3.17-15	Yes	HAZ-2 through HAZ-4	NA	LTS	No	Yes
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	LTS	Section 3.17.1; Impact WIL-2 pp. 3.17-15 – 3.17-16	Yes	AQ-3, GEO-1 through GEO-5 GEO-8	NA	LTS	No	Yes

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

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	☐	☐	☐

Discussion

Impact WIL-1

Proposed treatment activities have the potential to risk wildfire ignition as well as prescribed fire escaping its control lines. The proposed activities and their associated impacts are within the scope of the PEIR. Based on the analysis in the PEIR implementation of SPR's HAZ-1, HAZ-2, HAZ-3, and HAZ-4 will reduce the potential impact to less than significant.

Impact WIL-2

Steep slopes occur throughout the project area. The potential impact of proposed treatments are within the scope of those analyzed in PEIR. With the implementation of SPR's AQ-3, GEO-1, GEO-2, GEO-3, GEO-4, GEO-5, and GEO-8 potential impacts were determined to be less than significant.

New Impacts to Wildfire

The proposed treatment area includes land that is outside of the CalVTP treatable landscape thus represents a change to the geographic scope presented in the PEIR. However, areas within the geographic extent of the

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treatable landscape are directly adjacent to these areas and both share vegetation type and general landscape condition. Areas outside of the treatable landscape within the project area do not represent any new impacts and thus are within the scope of the PEIR.

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ATTACHMENT A

Mitigation Monitoring and Reporting for the Modini PSA

Introduction

CEQA Guidelines require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment.” A mitigation monitoring and reporting program (MMRP) is required for approval of the proposed project outlined in the PSA. Standard Project Requirements (SPRs) and Mitigation measures (MMs), which are part of the program description, outlined in the CalVTP PEIR, have been adopted. These SPRs and MMs have been designed to avoid or mitigate significant environmental effects which were identified in the PEIR.

Roles and Responsibilities

The implementing party (Audubon Canyon Ranch) is responsible for taking all actions necessary to implement the SPRs and MMs described in this document. The project proponent is responsible for administration of the project, including timing of mitigations, monitoring, and all project requirements. The CEQA lead agency (Sonoma Resource Conservation District), will be responsible for verification of all mitigations and monitoring efforts.

Reporting

The implementing party will document the compliance of the proposed project with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report.

STANDARD PROJECT REQUIREMENTS AND MITIGATION MEASURES CHECKLIST

Applicable. The SPR or mitigation measures listed below are applicable to the initial treatment and/or treatment maintenance. A yes/no is placed next to the initial treatment and treatment maintenance to indicate if it is applicable to that stage of treatment. MMs and SPRs not applicable to this project's initial or maintenance treatments are listed as such in the table.

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.

Verifying/Monitoring Entity. The verifying/monitoring entity is the agency or organization responsible for ensuring that the requirement is implemented.

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Administrative Standard Project Requirements				
SPR AD-2 Delineate Protected Resources: ACR will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR AD-4 Public Notifications for Prescribed Burning: At least days prior to the commencement of prescribed burning operations, the ACR 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 ACR (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken	Initial Treatment: Y Treatment Maintenance: Y	Prior to Prescribed Burning Operations	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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. ❖ <i>Posting of road signs may not be applicable when burning is occurring in some remote areas of the property (due to the large size of the ownership). In these instances, public notification will only occur via 2) and 3) above.</i>				
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, ACR will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. Information on proposed projects (PSA in progress): ▶ GIS data that include project location (as a point); ▶ project size (typically acres); ▶ treatment types and activities; and ▶ contact information for a representative of ACR. ACR will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. ACR will provide	Initial Treatment: Y Treatment Maintenance: Y	Prior to, during, and upon completion of all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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. ACR may also make information available to the public via other mechanisms (e.g., the proponent's own website). Information on approved projects (PSA complete): ▶ A completed PSA Environmental Checklist; ▶ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist); ▶ GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction). Information on completed projects: ▶ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction) ▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes ▪ Size of treated area (typically acres); ▪ Treatment types and activities; ▪ Dates of work; ▪ A list of the SPRs and mitigation measures that were implemented ▪ Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b). This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
Aesthetic and Visual Resource Standard Project Requirements				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Air Quality Standard Project Requirements				
SPR AQ-1 Comply with Air Quality Regulations: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	During all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR AQ-2 Submit Smoke Management Plan: ACR 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 and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to prescribed burning on greater than 10 acres. This requirement will be negotiated with the applicable air quality control jurisdiction.	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR AQ-3 Create Burn Plan: ACR 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	Initial Treatment: Y Treatment Maintenance:	Prior to prescribed burning	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
mortality, predicted emissions, greenhouse gas emissions, and soil heating. ACR 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.	Y			

SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, ACR will implement the following measures: Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. If road use creates excessive dust, ACR 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). ACR will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by ACR based on soil, traffic, site-specific conditions, and air quality regulations. Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. ACR will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113. Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
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Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements				
SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, ACR may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: N	Prior to preparation of PSA: Completed by Anthropological StudiesCenter (2020)	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: ACR will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, ACR will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following: A written description of the treatment location and boundaries. Brief narrative of the treatment objectives. A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.	Initial Treatment: Y Treatment Maintenance: N	Prior to preparation of PSA: Completed by Anthropological StudiesCenter (2020 & ALTA 2025)	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. A request for information regarding potential impacts to cultural resources from the proposed treatment. A detailed description of the depth of excavation, if ground disturbance is expected. In addition, ACR will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				

SPR-CUL-3 Pre-field Research: ACR 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.	Initial Treatment: Y Treatment Maintenance: N	Prior to preparation of PSA: Completed by Anthropological Studies Center (2020)	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
SPR CUL-4 Archaeological Surveys: ACR will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: N	Prior to preparation of PSA: Completed by Anthropological Studies Center (2020)	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. ACR, 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	Initial Treatment: Y Treatment Maintenance: Y	Prior to preparation of PSA: Completed by Anthropological Studies Center (2020)	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				

SPR CUL-6 Treatment of Tribal Cultural Resources: ACR, 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. ACR will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. ACR will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior o preparation ofPSA: Completedby Anthropological StudiesCenter (2020)	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, ACR 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	During all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
SPR CUL-8 Cultural Resource Training: ACR 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 to all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch /Sonoma Resource Conservation District
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Biological Resources Standard Project Requirements				

SPR BIO-1: Review and Survey Project-Specific Biological Resources. ACR 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 (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, ACR 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, ACR, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:	Initial Treatment: Y Treatment Maintenance: N	Prior to PSA submittal and treatments	Audubon Canyon Ranch	Audubon Canyon Ranch
1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the	Initial Treatment: Y Treatment Maintenance: Y	During All Treatments	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist. 2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR BIO-2: Require Biological Resource Training for Workers. ACR 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	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Sensitive Natural Communities and Other Sensitive Habitats				
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, ACR will: require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of <i>A Manual of California Vegetation</i> (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Potential and observed sensitive natural communities have been determined by Nomad Ecology.	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats: Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatment activities a WLPZ buffer shall be established around all Class I watercourses, Class II watercourses,	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities. Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements. Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service). Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural		springs, wet areas, and ponds. The WLPZ buffer width shall be determined based on HYD-4. All specifications described in this SPR shall be implemented within this WLPZ buffer during treatment.		
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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. ACR will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway. In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and ACR 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. ■ 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. ACR 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	Initial Treatment: Y Treatment Maintenance: Y	Chaparral ecosystems will not be treated.	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed). - During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. - For all treatment types in chaparral and coastal sage scrub, ACR, in consultation with a qualified RPF or qualified biologist will: Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. ACR will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale. The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by ACR in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. - These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance. - Additional measures will be applied to ecological restoration treatment types: For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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 ACR demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved. A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if ACR demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology. If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity. ▪ These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance. ▪ A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. ACR, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. ACR will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), ACR 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): clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; include training on <i>Phytophthora</i> diseases and other plant pathogens in the worker awareness training; minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for <i>Phytophtheras</i> in Native Habitats 2016). ▪ This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During all treatment activities within the oak woodland ecosystems.	Audubon Canyon Ranch	Audubon Canyon Ranch
Special-Status Plants				
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, ACR will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." ▪ Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatments	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. ▪ If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. ▪ For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances: If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. ▪ This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Environmentally Sensitive Habitat Areas				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA. Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the vegetation types present in the ESHA. A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs. Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs. ▪ This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
Invasive Plants and Wildlife				
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. ACR will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;	Initial Treatment: Y Treatment Maintenance: Y	During all Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles; treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Wildlife				
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, ACR will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. The qualified RPF or biologist will determine if following an established protocol is required, and ACR may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status	Initial Treatment: Y Treatment Maintenance: Y	Prior to all Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

species with potential to occur in the treatment area may not be required if presence of the species is assumed.				
This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. ACR 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: 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. Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted. 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. Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers. This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During prescribed herbivory treatments	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR BIO-12. Protect Common Nesting Birds, Including Raptors. ACR will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., 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	Initial Treatment: Y Treatment Maintenance: Y	During active bird nesting season. Feb – Aug.	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food). ▪ If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, ACR will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following: Establish Buffer. ACR 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. ACR 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				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

modifications will be determined by ACR in coordination with the qualified RPF or biologist. Defer Treatment. ACR 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 ACR to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by ACR 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), ACR 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.				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Geology, Soils, and Mineral Resource Standard Project Requirements				
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: ACR will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During Saturated soil conditions or when there is a 30% chance of rain. Applies to Mechanical, Prescribed herbivory, and herbicide treatments.	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR GEO-2 Limit High Ground Pressure Vehicles: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	During periods of soil saturation. Applies to mechanical treatments.	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR GEO-3 Stabilize Disturbed Soil Areas: ACR will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare,	Initial Treatment: Y Treatment Maintenance: Y	During all treatment activities.	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-4 Erosion Monitoring: ACR 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, ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	Prior to rainy season, and after first large storm or rainfall event with greater than or equal to 1.5 " in 24 hours.	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR GEO-5 Drain Stormwater via Water Breaks: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	Prior to rainy season. Pertains to Mechanical, manual, and prescribed burn treatment activities.	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR GEO-6 Minimize Burn Pile Size: ACR 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). ACR 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	Initial Treatment: Y Treatment Maintenance: Y	During pile burning	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

prescribed burning treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-7 Minimize Erosion: To minimize erosion, ACR will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by ACR prior to the treatment activity. (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. ▪ This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During al treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR GEO-8 Steep Slopes: ACR will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by ACR such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	For project on slopes greater than 50% RPF. Will evaluate potential of unstable soil. Treatments will not occur within these identified areas unless reviewed by a licensed Geologist.	Audubon Canyon Ranch	Audubon Canyon Ranch
Greenhouse Gas Emissions Standard Project Requirements				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

Hazardous Material and Public Health and Safety Standard Project Requirements				
SPR HAZ-1 Maintain All Equipment: ACR 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, ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during all treatments	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HAZ-2 Require Spark Arrestors: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	During manual treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HAZ-3 Require Fire Extinguishers: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	during all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: ACR will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance:	During all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
	Y			

SPR HAZ-5 Spill Prevention and Response Plan: ACR or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): - a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; - a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; - procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. ▪ This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to herbicide treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HAZ-6 Comply with Herbicide Application Regulations: ACR will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. ACR will prepare all herbicide applications to do the following: - Be implemented consistent with recommendations prepared annually by a licensed PCA. - Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. - Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. - Be applied by an applicator appropriately licensed by the State. ▪ This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to herbicide treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HAZ-7 Triple Rinse Herbicide Containers: ACR 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.	Initial Treatment: Y	During herbicide treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

ACR will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non- recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Treatment Maintenance: Y			
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: ACR will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to herbicide treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Hydrology and Water Quality Standard Project Requirements				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to All Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HYD-2 Avoid Construction of New Roads: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	Prior to All Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: ACR will include the following water quality protections for all prescribed herbivory treatments: Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet will be maintained between sensitive and actively grazed areas. 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.	Initial Treatment: Y Treatment Maintenance: Y	During Prescribed Herbivory treatment activities.	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

Treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed. ▪ This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.								
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: ACR will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes. ► Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths					Initial Treatment: Y Treatment Maintenance: Y	Prior to All Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Water Class	Class I	Class II	Class III	Class IV				
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.				
WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ								
Standard Project Requirements					Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

< 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) ■ 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 ACR 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.					
Standard Project Requirements		Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers. Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse. Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes. Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: ACR will implement the following measures when applying herbicides: Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled	Initial Treatment: Y Treatment Maintenance: Y	During application of herbicides	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

for use in aquatic environments may be used within the WLPZ provided that ACR 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 ACR and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. ▪ This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.				
SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, ACR will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior to All Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Noise Standard Project Requirements				
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	During all Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
SPR NOI-5 Restrict Equipment Idle Time: ACR 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. ❖ <i>This SPR may not be possible during prescribed burning operations, when fire engines must remain idling.</i>	Initial Treatment: Y Treatment Maintenance: Y	During all treatment activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Recreation Standard Project Requirements				
■ Transportation Standard Project Requirements				

SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities ACR 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	Initial Treatment: Y Treatment Maintenance: Y	For prescribed fire treatments adjacent to Hwy 1.	Audubon Canyon Ranch	Audubon Canyon Ranch
Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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 ACR, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance. Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP, if a TMP is determined by ACR to be necessary. 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.				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Aesthetics and Visual Resources				
Air Quality				
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not be feasible. ACR will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible.	Initial Treatment: Y Treatment Maintenance: Y	During treatment activities:	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

■ Techniques for reducing emissions may include, but are not limited to, the following: Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, ACR will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: - meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; - be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; - contain no fatty acids or functionalized fatty acid esters; and - have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_x and PM.			Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

Archaeological, Historical, and Tribal Cultural Resources				
Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with ACR 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 ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	If Cultural resources are discovered	Audubon Canyon Ranch	Audubon Canyon Ranch
Biological Resources				
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, ACR 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	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatments activities.	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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 ACR 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 (nor use of associated accelerants) will occur within 50 feet of listed plants. - For species listed under ESA or CESA, if ACR cannot avoid loss by implementing no-disturbance buffers, ACR 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.				
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR	Initial Treatment: Y Treatment Maintenance:	During all Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

BIO-7, ACR 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 (nor use of associated 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	Y	During all Treatment Activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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 ACR determines the impact on special-status plants would be less than significant, no further mitigation will be required. If ACR 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.				
Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special- Status Plants If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, ACR 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. ACR 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.	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatments activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

▪ 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 ACR instead: creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species); purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and 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. ▪ 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: the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when: habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region. ▪ 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). ACR will submit evidence that the necessary mitigation has been implemented or that ACR has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

▪ 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. ▪ 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. ▪ 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. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by ACR (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.				
BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) ▪ If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), ACR will avoid adverse effects to the species by implementing the following. ▪ <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> ▪ ACR will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: ▪ 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as	Initial Treatment: Y Treatment Maintenance: Y	During all Treatment Activities. .	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. For species listed under ESA or CESA, if ACR cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, ACR will implement Mitigation Measure BIO-2c. Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided. <u>Maintain Habitat Function</u> ACR will design treatment activities to maintain the habitat function, by implementing the following: While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

percent for coastal California gnatcatcher]) such that habitat function is maintained. A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, ACR will implement Mitigation Measure BIO-2c.				
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) - If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), ACR will avoid or minimize adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> ACR will implement the following to avoid mortality, injury, or disturbance of individuals: - For all treatment activities except prescribed burning, ACR 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	Initial Treatment: Y Treatment Maintenance: Y	During all Treatment Activities.	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

below 100 feet from an occupied site, a qualified RPF or biologist will provide ACR with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. For prescribed burning, ACR 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. ACR may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods. <u>Maintain Habitat Function</u> For all treatment activities, ACR will design treatment activities to maintain the habitat function by implementing the following: While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. ▪ A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If ACR determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If ACR determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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.				
Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) - If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and ACR determines that additional mitigation is necessary to reduce significant impacts, ACR 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. - Compensation may include: 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 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). - ACR 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: 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),	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatments activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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). ACR will submit evidence that the necessary mitigation has been implemented or that ACR has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. ▪ 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat. ▪ Review requirements are as follows: ACR 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. For species listed under ESA or CESA or a California Fully Protected Species, ACR will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment. For other special-status wildlife species ACR may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information. ▪ Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by ACR (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

following protective measures will be implemented to avoid and minimize impacts to valley elderberry longhorn beetle: If elderberry shrubs are 165 feet or more from the treatment area, and treatment activities would not encroach within this distance, direct or indirect impacts are not expected and further mitigation is not required. If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented: A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant will be fenced or flagged and maintained to avoid direct impacts (e.g., damage to root system) that could damage or kill the plant, with the exception of the following activities: Manual trimming of elderberry shrubs will only occur between November and February and will avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects on valley elderberry longhorn beetle. Manual or mechanical vegetation treatment within the drip-line of any elderberry shrub will be limited to the season when adults are not active (August - February), will be limited to methods that do not cause ground disturbance, and will avoid damaging the elderberry. 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. ▪ 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.				
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Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands ACR 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 <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 http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural	Initial Treatment: Y Treatment Maintenance: Y	During treatment activities in oak woodland habitats.	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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 <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 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 <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 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				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

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 ACR 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 ACR to be infeasible, ACR 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 ACR determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If ACR 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				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.				
Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands - If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, ACR will implement the following actions: Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: restoring sensitive natural community or oak woodland functions and acreage within the treatment area; restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ACR will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The	Initial Treatment: Y Treatment Maintenance: Y	Prior to all treatments activities	Audubon Canyon Ranch	Audubon Canyon Ranch
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity

project proponent will submit evidence that the necessary mitigation has been implemented or that ACR has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. - ACR 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.				
Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity. 2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. - The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. Within this buffer, herbicide application is prohibited. Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging. Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: - No special-status species are present in the wetland habitat - The wetland habitat function would be maintained. - The prescribed burn is within the normal fire return interval for the wetland vegetation types present - Fire containment lines and pile burning are prohibited within the buffer - No fire ignition (nor use of associated accelerants) will occur within the wetland buffer				
Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10: Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or	Initial Treatment: Y Treatment Maintenance: Y	During treatment activities.	Audubon Canyon Ranch	Audubon Canyon Ranch

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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.				
Greenhouse Gas Emissions				
Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns - When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018): - reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; - reduce the total area burned through mosaic burning; - burn when fuels have a higher fuel moisture content; - reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and - schedule burns before new fuels appear. - As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.	Initial Treatment: Y Treatment Maintenance: Y	During prescribed burning treatment activities.	Audubon Canyon Ranch	Audubon Canyon Ranch

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

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
FEDERAL/STATE ENDANGERED OR THREATENED AND CALIFORNIA RARE PLANT RANK SPECIES					
<i>Astragalus claramus</i> Clara Hunt's milk-vetch	Fed: FE CA: ST CEQA: 1B.1	Occurs on clay, rocky, serpentine (sometimes), and volcanic (sometimes) soils in chaparral (openings), cismontane woodland, and valley and foothill grassland at elevations between 75 and 275 meters. Known from NAP and SON counties.	March-May annual herb	Suitable vegetation associations and soil are present in the study area. The nearest CNDDDB occurrence is an specific, extirpated occurrence (EONDX #6731) approximately 14 miles south-southeast of the property.	Possible
<i>Blennosperma bakeri</i> Sonoma sunshine	Fed: FE CA: SE CEQA: 1B.1	Occurs in mesic valley and foothill grassland and vernal pools at elevations between 10 and 110 meters. Known from MEN and SON counties.	March-May annual herb	Suitable vegetation associations (valley and foothill grassland) are present in the study area.	Possible
<i>Cordylanthus tenuis</i> subsp. <i>capillaris</i> Pennel's bird's-beak	Fed: FE CA: SR CEQA: 1B.2	Occurs in serpentine chaparral and closed-cone coniferous forest at elevations between 60 and 305 meters. Known from fewer than five occurrences in SON county.	June-September annual herb (hemiparasitic)	Although suitable vegetation association (serpentine chaparral) is present in the study area, the study site appears out of range for the species. The nearest CNDDDB occurrence (EONDX #52823) is approximately 13 miles southwest.	Not Expected
<i>Eryngium constancei</i> Loch Lomond button-celery	Fed: FE CA: SE CEQA: 1B.1	Occurs in vernal pools at elevations between 460 and 855 meters. Known from only three occurrences in LAK and SON counties.	April-June annual/perennial herb	It is possible that ephemeral standing water could be present on site and the nearest CNDDDB record (EONDX #17202) is approximately 9.5 miles north.	Not Expected
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	Fed: None CA: SE CEQA: 1B.2	Occurs on clay soils in margins of marshes and swamps and vernal pools at elevations between 10 and 2,375 meters. Known from FRE, LAK, LAS, MAD, MEN, MER, MOD, PLA, SAC, SHA, SIS, SJQ, SOL, SON, and TEH counties. Known from one occurrence in Oregon.	April-August annual herb	It is possible that ephemeral standing water could be present on site but clay soils are not present. The nearest specific CNDDDB record (EONDX #26357) is approximately 10.2 miles north.	Not Expected
<i>Hesperolinon didymocarpum</i> Lake County western flax	Fed: None CA: SE CEQA: 1B.2	Occurs in chaparral, cismontane woodland, valley and foothill grassland on serpentine substrates at elevations between 330 and 365 meters. Known from fewer than 10 occurrences in the Big Canyon area in LAK county.	May-July annual herb	Suitable vegetation association is present in the study area, but the nearest CNDDDB occurrence (EONDX #13806) is approximately 7.6 miles northeast.	Possible
<i>Lasthenia burkei</i> Burke's goldfields	Fed: FE CA: SE CEQA: 1B.1	Occurs in mesic meadows and seeps and vernal pools at elevations between 15 and 600 meters. Known from LAK, MEN, NAP, and SON counties.	April-June annual herb	Suitable vegetation association (seeps) is present in the study area, but the nearest CNDDDB occurrence (EONDX #3633) is approximately 5.9 miles southwest.	Not Expected

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	Fed: FE CA: ST CEQA: 1B.1	Occurs in meadows and seeps, valley and foothill grassland, and vernal pools at elevations between 15 and 305 meters. Known from NAP and SON counties. May be introduced in NAP county.	April-May annual herb	Suitable vegetation associations (seeps and grassland) are present in the study area, and the nearest CNDDDB occurrence (EONDX #2454) is approximately 4.95 miles south-southeast.	Possible
<i>Navarretia leucocephala</i> subsp. <i>pauciflora</i> few-flowered navarretia	Fed: FE CA: ST CEQA: 1B.1	Occurs in volcanic ash in vernal pools at elevations between 400 and 855 meters. Intergrades rarely with subsp. <i>plieantha</i> . Known from LAK and NAP counties.	May-June annual herb	It is possible that ephemeral standing water could be present on site and the nearest CNDDDB record (EONDX #33842) is a specific occurrence 7 miles north of the study area.	Not Expected
<i>Navarretia leucocephala</i> subsp. <i>plieantha</i> many-flowered navarretia	Fed: FE CA: SE CEQA: 1B.1	Occurs in volcanic ash in vernal pools at elevations between 30 and 950 meters. Intergrades rarely with subsp. <i>pauciflora</i> . Known from less than ten occurrences in LAK and SON counties.	May-June annual herb	It is possible that ephemeral standing water could be present on site and the nearest CNDDDB record (EONDX #97086) is a specific occurrence 7.3 miles north of the study area.	Not Expected
<i>Orcuttia tenuis</i> slender Orcutt grass	Fed: FT CA: SE CEQA: 1B.1	Occurs in vernal pools, often on gravelly substrates, at elevations between 35 and 1,760 meters. Known from BUT, LAK, LAS, MOD, PLU, SAC, SHA, SIS, and TEH counties.	May-September (October) annual herb	It is possible that ephemeral standing water could be present on site and the nearest CNDDDB record (EONDX #2241) is a specific occurrence 10 miles north of the study area.	Not Expected
<i>Panicum acuminatum</i> var. <i>thermale</i> Geysers panicum	Fed: None CA: SE CEQA: 1B.2	Occurs in geothermally altered soil in closed-cone coniferous forest, riparian forest, and valley and foothill woodland, sometimes near streams at elevations between 305 and 2,470 meters. Known only from The Geysers and Lassen Volcanic NP areas in LAK, PLU, SHA, SON, and TEH counties. Plants in FRE county need verification.	June-August annual/perennial herb	Suitable vegetation associations are present in the study area. The nearest CNDDDB occurrence (EONDX #4553) is approximately 2.5 miles north of the study area.	Possible
<i>Plagiobothrys strictus</i> Calistoga popcornflower	Fed: FE CA: ST CEQA: 1B.1	Occurs in alkaline areas and thermal springs in meadows and seeps, valley and foothill grassland, and vernal pools at elevations between 90 and 160 meters. Known from two extant occurrences in NAP county.	March-June annual herb	Suitable vegetation association (seeps) is present in the study area, but the nearest CNDDDB occurrence (EONDX #24389) is a non-specific EO for the entire Calistoga quad, approximately 9 miles southeast.	Not Expected

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Poa napensis</i> Napa blue grass	Fed: FE CA: SE CEQA: 1B.1	Occurs in alkaline meadows and seeps and valley and foothill grassland near thermal springs at elevations between 100 and 200 meters. Known from two occurrences in NAP county.	May-August perennial herb	Suitable vegetation association (seep) is present in the study area, but the nearest CNDDDB occurrence (EONDX #23438) is approximately 10.3 miles southeast of the study area.	Not Expected
<i>Sedella leiocarpa</i> Lake County stonecrop	Fed: FE CA: SE CEQA: 1B.1	Occurs in vernal mesic depressions of volcanic outcrops in cismontane woodland, valley and foothill grassland, and vernal pools at elevation between 365 and 790 meters. Known from LAK county.	April-May annual herb	Suitable vegetation associations (volcanic outcrops) are present in the study area. The nearest CNDDDB occurrence (EONDX #4505) is approximately 5.2 miles north of the study area.	Possible
<i>Sidalcea oregana</i> subsp. <i>valida</i> Kenwood Marsh checkerbloom	Fed: FE CA: SE CEQA: 1B.1	Occurs in freshwater marshes and swamps at elevations between 115 and 150 meters. Known from two occurrences in SON county.	June-September perennial rhizomatous herb	Freshwater marshes and swamps are not present in the study area.	None
<u>CALIFORNIA RARE PLANT RANK SPECIES</u>					
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	Fed: None CA: None CEQA: 1B.2	Occurs in broadleaved upland forest openings, chaparral, and cismontane woodland at elevations between 50 and 2,000 meters. Known from LAK, MRN, NAP, and SON counties.	April-July perennial deciduous shrub	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #98074) is approximately 6.2 miles south of the study area.	Possible
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	Fed: None CA: None CEQA: 1B.2	Occurs in cismontane woodland, coastal bluff scrub, and valley and foothill grassland at elevations between 3 and 500 meters. Known from ALA, CCA, COL, LAK, MRN, NAP, SCL, SCR, SFO, SMT, SON, SUT, and YOL counties. May occur in SHA and SIS counties.	March-June annual herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #49052) is approximately 8.9 miles east of the study area.	Possible
<i>Anomobryum julaceum</i> slender silver moss	Fed: None CA: None CEQA: 4.2	Occurs on damp rock and soil on outcrops (usually on roadcuts) in broadleaved upland forest, lower montane coniferous forest, and North Coast coniferous forest at elevations between 100 and 1000 meters. Known from BUT, CCA, HUM, LAX, MNT, MPA, SBA, SCR, SHA, SMT, and SON counties.	moss	Suitable rock and soil associations are present in the study area, but there are no herbarium records within 50 miles of the study area.	Not Expected

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Antirrhinum subcordatum</i> dimorphic snapdragon	Fed: None CA: None CEQA: 4.3	Occurs on serpentine (sometimes) substrates in chaparral and lower montane coniferous forest at elevations between 185 and 800 meters. Known from COL, GLE, LAK, and TEH counties.	April-July annual herb	Suitable vegetation and soil associations (serpentine) are present in the study area. But the nearest herbarium record (Rattan s.n., from 1884) is from Stony Creek in Colusa County.	Possible
<i>Antirrhinum virga</i> twig-like snapdragon	Fed: None CA: None CEQA: 4.3	Occurs on rocky, often serpentine soils in openings of chaparral and lower montane coniferous forest at elevations between 100 and 2,015 meters. Known from LAK, NAP, SON, and YOL counties.	June-July perennial herb	Suitable vegetation and soil associations (serpentine) are present in the study area. The nearest herbarium record (Neilson 2833, from 1974) is approximately 3.3 miles northeast of the study area.	Possible
<i>Arctostaphylos manzanita</i> subsp. <i>elegans</i> Konocti manzanita	Fed: None CA: None CEQA: 1B.3	Occurs on volcanic soils in chaparral, cismontane woodland, and lower montane coniferous forest at elevations between 395 and 1615 meters. Known from COL, GLE, HUM, LAK, MEN, NAP, SHA, SON, TEH, and TRI counties.	(January) March-May (July) perennial evergreen shrub	Suitable vegetation associations are present in the study area. The nearest CNDDDB occurrence (EONDX #97471) is approximately 5.4 miles east-northeast of the study area.	Possible
<i>Arctostaphylos stanfordiana</i> subsp. <i>decumbens</i> Rincon Ridge manzanita	Fed: None CA: None CEQA: 1B.1	Occurs in chaparral on rhyolitic soils and cismontane woodland at elevations between 75 and 370 meters. Known from NAP and SON counties.	February-April (May) perennial evergreen shrub	Although suitable vegetation associations are present in the study area, the required rhyolitic soils are absent. The nearest CNDDDB occurrence (EONDX #14028) is approximately 10.1 miles west-southwest of the study area.	Not Expected
<i>Arctostaphylos stanfordiana</i> subsp. <i>riachei</i> Raiche's manzanita	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, often (serpentine) substrates in chaparral and openings in lower montane coniferous forest at elevations between 450 and 1,035 meters. Known from LAK and MEN counties.	February-April perennial evergreen shrub	Suitable vegetation associations and serpentine substrates are present in the study area. The nearest CNDDDB occurrence (EONDX #98346) is approximately 8.5 miles east-northeast of the study area.	Possible
<i>Asclepias solanoana</i> serpentine milkweed	Fed: None CA: None CEQA: 4.2	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest on serpentine substrates at elevations between 230 and 1,860 meters. Known from COL, GLE, LAK, MEN, NAP, SHA, SON, THE, and TRI counties.	May-July (August) perennial herb	Suitable vegetation associations and soil (serpentine) are present in the study area. The nearest herbarium record (Neilson 3967, from 1978) is a collection from approximately 1.5 miles north of the study area.	Possible

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Astragalus breweri</i> Brewer's milk-vetch	Fed: None CA: None CEQA: 4.2	Occurs on serpentine and volcanic soils in chaparral, cismontane woodland, meadows and seeps, and gravelly openings in valley and foothill grassland at elevations between 90 and 730 meters. Known from COL, LAK, MEN, MRN, NAP, and SON counties.	April-June annual herb	Suitable vegetation associations and soil (serpentine) are present in the study area. The nearest specific herbarium record is a 1975 collection (Dryden 149) 7.5 miles northeast.	Present
<i>Astragalus clevelandii</i> Cleveland's milk-vetch	Fed: None CA: None CEQA: 4.3	Occurs in serpentine seeps within chaparral, cismontane woodland, and riparian forest at elevations between 200 and 150 meters. Known from COL, LAK, NAP, SON, TEH, and YOL counties.	June-September perennial herb	Suitable vegetation associations and soil (serpentine seeps) are present in the study area. The nearest herbarium record (Hoover 5906, from 1942) is approximately 5.6 miles southeast on Mt. St. Helena.	Possible
<i>Astragalus rattanii</i> var. <i>jepsonianus</i> Jepson's milk-vetch	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, cismontane woodland, valley and foothill grassland often on serpentine soils at elevations between 295 and 700 meters. Known from COL, GLE, LAK, NAP, SBT, SON, TEH, and YOL counties.	March-June annual herb	Suitable vegetation and soil association (serpentine) are present in the study area. The nearest CNDDDB occurrence (EONDx #94189) is approximately 5 miles east of the study area.	Possible
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	Fed: None CA: None CEQA: 1B.2	Occurs on volcanic soils in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland at elevations between 110 and 915 meters. Known from LAK, NAP, and SON counties.	May-July perennial bulbiferous herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDx #47365) is a historic non-specific occurrence approximately 5 miles east of the study area.	Possible
<i>Calamagrostis ophitidis</i> serpentine reed grass	Fed: None CA: None CEQA: 4.3	Occurs in lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and chaparral, openings and often north-facing slopes,	April-July perennial herb	Suitable vegetation associations (seeps and grasslands) are present in the study area. There is a non-specific herbarium collection from 1948 (Tofsrud s.n.) recorded along Pine Flat Rd. which runs along and through Modini.	Possible
<i>Calandrinia breweri</i> Brewer's calandrinia	Fed: None CA: None CEQA: 4.2	Occurs within chaparral and coastal scrub in burned areas, disturbed areas, sometimes on loam and sandy substrates.	(January) March-June annual herb	Suitable vegetation associations and soil are present in the study area. The nearest herbarium collection (de Nevers 13975, from 2018) is within 10 miles south of the study area at Pepperwood Preserve. This species is a fire follower and the most recent fire on site was the Kincaid Fire in 2019.	Possible

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<i>Calochortus uniflorus</i> pink star-tulip	Fed: None CA: None CEQA: 4.2	Occurs in coastal prairie, coastal scrub, meadows and seeps, and North Coast coniferous forest at elevations between 10 and 1070 meters. Known from COL, LAK, MNT, MRN, NAP, SCR, SMT, and SON counties.	April-June perennial bulbiferous herb	Suitable vegetation associations are present in the study area. The nearest herbarium collection (Wolf 1897, from 1928) is approximately 6.2 miles east of the study area.	Possible
<i>Calyptridium quadripetalum</i> four-petaled pussypaws	Fed: None CA: None CEQA: 4.3	Occurs in chaparral and lower montane coniferous forest, usually on serpentine and sometimes on gravelly or sandy substrates, at elevations between 315 and 2,040 meters. Known from COL, LAK, MEN, NAP, SON, and TEH counties.	April-June annual herb	Suitable vegetation associations and soil are present in the study area, and nearest herbarium record (LaPré s.n., from 1986) is approximately 1.94 miles north of the study area.	Possible
<i>Calystegia collina</i> subsp. <i>oxyphylla</i> Mt. Saint Helena morning-glory	Fed: None CA: None CEQA: 4.2	Occurs on serpentine soils in chaparral, lower montane coniferous forest, and valley and foothill grassland at elevations between 279 and 1010 meters. Known from COL, LAK, MEN, MRN, NAP, SBT, and SON counties.	April-June perennial rhizomatous herb	Suitable vegetation associations are present. This species is recorded as occurring on the property (EONDX #12306), last updated in 2007.	Present
<i>Calystegia collina</i> subsp. <i>tridactylosa</i> three-fingered morning-glory	Fed: None CA: None CEQA: 1B.2	Occurs in openings in chaparral and cismontane woodland on gravelly, rocky, serpentine substrates at elevations between 0 and 600 meters. Known from MEN, LAK, and COL counties.	April-June perennial rhizomatous herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #114536) is approximately 7.75 miles north of the study area.	Possible
<i>Carex praticola</i> northern meadow sedge	Fed: None CA: None CEQA: 2B.2	Occurs in mesic meadows and seeps at elevations below 3,200 meters. Known from DNT, HUM, LAK, MRN, MNO, SIS, TEH, TRI, and TUO counties.	May-July perennial herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #99856) is approximately 6.2 miles northeast of the study area.	Possible
<i>Castilleja ambigua</i> var. <i>ambigua</i> johnny-nip	Fed: None CA: None CEQA: 4.2	Occurs in coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, and vernal pool margins at elevations between 0 and 435 meters. Known from ALA, CCA, DNT, HUM, MEN, MRN, NAP, SCR, SMT, SOL, and SON counties.	March-August annual herb (hemiparasitic)	Suitable vegetation association (grassland) is present in the study area. There is a non-specific herbarium collection from 1971 (Chuang, Heckard, Bacigalupi, and Rubtsoff 6897) collected approximately 16 miles south.	Possible
<i>Castilleja rubicundula</i> var. <i>rubicundula</i> pink creamsacs	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral openings, cismontane woodland, meadows and seeps, and valley and foothill grassland at elevations between 20 and 910 meters. Known from BUT, COL, GLE, LAK, NAP, SCL, SHA, and YOL counties.	April-June annual herb (hemiparasitic)	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #114529) is approximately 8.6 miles east of the study area.	Possible

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<i>Ceanothus confusus</i> Rincon Ridge ceanothus	Fed: None CA: None CEQA: 1B.1	Occurs on serpentine (sometimes) and on volcanic (sometimes) soils in chaparral, cismontane woodland, and closed-cone coniferous forest at elevations between 75 and 1065 meters. Known from LAK, MEN, NAP, and SON counties.	February-June perennial evergreen shrub	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #95799) is approximately 2 miles east of the study area.	Possible
<i>Ceanothus divergens</i> Calistoga ceanothus	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, serpentine soils in chaparral at elevations between 170 and 950 meters. Known from LAK, NAP, and SON counties.	February-April perennial evergreen shrub	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #18682) is approximately 2.4 miles northeast of the study area.	Possible
<i>Ceanothus purpureus</i> holly-leaved ceanothus	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, volcanic soils in chaparral, cismontane woodland at elevations between 120 and 640 meters. Known from NAP, SOL, and SON counties.	February-June perennial evergreen shrub	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #98445) is approximately 10.8 miles east-southeast of the study area.	Possible
<i>Ceanothus sonomensis</i> Sonoma ceanothus	Fed: None CA: None CEQA: 1B.2	Occurs on sandy, serpentine, and volcanic soils in chaparral at elevations between 215 and 800 meters. Known from LAK, NAP, and SON counties.	February-April perennial evergreen shrub	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #46117) is approximately 10.9 miles east-southeast of the study area.	Possible
<i>Centromadia parryi</i> subsp. <i>parryi</i> pappose tarplant	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, coastal prairie, coastal salt marshes and swamps, meadows and seeps, and vernal mesic valley and foothill grassland often on alkaline soils at elevations between 0 and 420 meters. Known from BUT, COL, GLE, LAK, NAP, SMT, SOL, SON, and YOL counties.	May-November annual herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #56493) is approximately 10.54 miles south of the study area.	Possible
<i>Chlorogalum</i> <i>pomeridianum</i> var. <i>minus</i> dwarf soaproot	Fed: None CA: None CEQA: 1B.2	Occurs in serpentine chaparral at elevations between 305 and 1,000 meters. Known from ALA, COL, GLE, LAK, SLO, SCL, SON, and TEH counties.	May-August perennial bulbiferous herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #34748) is approximately 6.9 miles southeast of the study area.	Possible
<i>Clarkia breweri</i> Brewer's clarkia	Fed: None CA: None CEQA: 4.2	Occurs in chaparral, cismontane woodland, and coastal scrub often on serpentine soils at elevations between 215 and 1115 meters. Known from ALA, FRE, MER, MNT, NAP, SBT, SCL, SCR, SON, and STA counties.	April-June annual herb	Suitable vegetation associations are present in the study area. But the nearest herbarium record (Clifton s.n., from 1983) is a collection from Marsh Creek in Contra Costa County.	Not Expected

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<i>Clarkia gracilis</i> subsp. <i>tracyi</i> Tracy's clarkia	Fed: None CA: None CEQA: 4.2	Occurs on serpentine soils in chaparral openings at elevations between 65 and 650 meters. Known from COL, LAK, NAP, and TEH counties.	April-July annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest herbarium record (Mallek s.n., from 2007) approximately 17 miles northwest of the study area.	Possible
<i>Collomia diversifolia</i> serpentine collomia	Fed: None CA: None CEQA: 4.3	Occurs in chaparral and cismontane woodland on gravelly, rocky serpentine (sometimes) soils at elevations between 200 and 600 meters. Known from CCA, COL, GLE, HUM, LAK, MEN, MRN, NAP, ORA, SHA, SON, STA, TEH, and YOL counties.	May-June annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest herbarium record (Mason 14152, from 1953) approximately 5 miles northeast of the study area.	Possible
<i>Cordylanthus tenuis</i> subsp. <i>brunneus</i> serpentine bird's-beak	Fed: None CA: None CEQA: 4.3	Occurs usually on serpentine soils in chaparral and cismontane woodland, closed-cone coniferous forest at elevations between 305 and 915 meters. Known from COL, GLE, LAK, MEN, NAP, and SON counties.	July-August annual herb (hemiparasitic)	Suitable vegetation associations and soil are present in the study area, and the nearest herbarium record (Clifton s.n., from 1984) is approximately 1.9 miles north of the study area.	Possible
<i>Cryptantha dissita</i> serpentine cryptantha	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 395 and 580 meters. Known from COL, LAK, MEN, SIS, and SON counties.	April-June annual herb	Suitable vegetation associations and soil are present in the study area. This species is recorded as occurring on the property (EONDX #61076), last updated in 2020.	Present
<i>Cypripedium montanum</i> mountain lady's-slipper	Fed: None CA: None CEQA: 4.2	Occurs in broadleafed upland forest, cismontane woodland, lower montane coniferous forest, and North Coast coniferous forest at elevations between 185 and 2225 meters. Known from AMA, BUT, DNT, GLE, HUM, LAS, MAD, MEN, MOD, MPA, PLU, SCR, SHA, SIS, SMT, SON, TEH, TRI, and TUO counties.	March-August perennial rhizomatous herb	Suitable vegetation associations are present in the study area, but the nearest herbarium record (Hawver s.n., from 1915) is approximately 13.5 miles west at Skaggs Springs.	Not Expected
<i>Delphinium uliginosum</i> swamp larkspur	Fed: None CA: None CEQA: 4.2	Occurs in serpentine seeps in chaparral and valley and foothill grassland at elevations between 340 and 610 meters. Known from BUT, COL, LAK, MEN, NAP, and SON counties.	May-June perennial herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (Hoover 5907, from 1942) is approximately 5.6 miles east on north side of Mt. St. Helena.	Possible

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<i>Downingia pusilla</i> dwarf downingia	Fed: None CA: None CEQA: 2B.2	Occurs in mesic valley and foothill grassland and vernal pools at elevations between 1 and 445 meters. Known from FRE, MER, NAP, PLA, SAC, SJQ, SOL, SON, STA, TEH, and YUB counties.	March-May annual herb	Although suitable vegetation associations are present in the study area, the preferred vernal pool hydrology is absent. The nearest CNDDB record (EONDX #4509) is 10 miles south-southwest, which is the northern most occurrence.	Not Expected
<i>Downingia willamettensis</i> Cascade downingia	Fed: None CA: None CEQA: 2B.2	Occurs along lake margins in cismontane woodland and valley and foothills grassland, as well as in vernal pools at elevation between 15 and 1,110 meters. Known from DNT, HUM, LAK, and MEN counties.	June-July (September) annual herb	Vernal pools and lake margins are not present in the study area. Closest CNDDB record (EONDX #113453) is approximately 11 miles north-northeast.	Not Expected
<i>Eriastrum brandegeae</i> Brandegee's eriastrum	Fed: None CA: None CEQA: 1B.1	Occurs in chaparral, cismontane woodland within sandy, volcanic soils at elevations between 425 and 840 meters. Known from LAK county.	April-August annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDB occurrence (EONDX #18446) is approximately 7.6 miles north of the study area. However, this would be a southern range extension for this species.	Not Expected
<i>Erigeron biolettii</i> streamside daisy	Fed: None CA: None CEQA: 3	Occurs in mesic and rocky broadleafed upland forest, cismontane woodland, and North Coast coniferous forest at elevations between 30 and 1,100 meters. Known from HUM, MEN, MRN, NAP, SOL, and SON counties.	June-October perennial herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (Ruygt 1059, from 1981) is approximately 9 miles to the east.	Possible
<i>Erigeron greenei</i> Greene's narrow-leaved daisy	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine and volcanic soils in chaparral at elevations between 80 and 1,005 meters. Known from COL, LAK, NAP, and SON counties.	May-September perennial herb	Suitable vegetation associations and soil are present in the study area. This species is recorded as occurring on the property (EONDX #99514), last updated in 2015.	Present
<i>Eriogonum nervulosum</i> Snow Mountain buckwheat	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 300 and 2,105 meters. Known from fewer than twenty occurrences in COL, GLE, LAK, NAP, and SON counties.	June-September perennial rhizomatous herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDB occurrence (EONDX #14167) is approximately 2.4 miles northeast of the study area.	Possible
<i>Eriogonum umbellatum</i> var. <i>bahiiforme</i> bay buckwheat	Fed: None CA: None CEQA: 4.2	Occurs on rocky, often serpentine soils in cismontane woodland and lower montane coniferous forest at elevations between 700 and 2,200 meters. Known from ALA, CCA, COL, GLE, MEN, MNT, NAP, SBA, SBT, SCL, SON, and TEH counties.	July-September perennial herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (King s.n., from 1919) is approximately 9 miles to the east on east side of Mt. St. Helena.	Possible

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<i>Erythranthe nudata</i> bare monkeyflower	Fed: None CA: None CEQA: 4.3	Occurs in serpentine seeps in chaparral and cismontane woodland at elevations between 200 and 700 meters. Known from COL, GLE, LAK, MEN, NAP, SBA, and SON counties.	May-June annual herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (Hoffman 1686, from 1948) is approximately 8.1 miles to the east near Middletown.	Possible
<i>Erythronium helenae</i> St. Helena fawn lily	Fed: None CA: None CEQA: 4.2	Occurs on serpentine (sometimes) and volcanic (sometimes) soils in chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland at elevations between 350 and 1,220 meters. Known from LAK, NAP, and SON counties.	March-May perennial bulbiferous herb	Suitable vegetation associations are present in the study area. the nearest herbarium record (Bacigulpi, Hutchison, and Lyman 5574, from 1956) is approximately 4.7 miles to the east in the Mayacas Mountains. This species is recorded on a CalFlora checklist (record #gr14127) for the property.	Possible
<i>Fritillaria purdyi</i> Purdy's fritillary	Fed: None CA: None CEQA: 4.3	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest often on adobe soils at elevations between 175 and 2,255 meters. Known from COL, GLE, HUM, LAK, MEN, NAP, SON, TEH, TRI, and YOL counties.	March-June perennial bulbiferous herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (Baker s.n., from 1927) is approximately approximately 6 miles to the east in Robert Louis Stevenson State Park.	Possible
<i>Grimmia torenii</i> Toren's grimmia	Fed: None CA: None CEQA: 1B.3	Occurs in openings and on rocky, boulder, and rock walls in chaparral, cismontane woodland, lower montane coniferous forest on volcanic and carbonic soils at elevations between 325 and 1160 meters. Known from CCA, LAK, MEN, MNT, SCR, SMT counties.	moss	Suitable vegetation and rock associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #93675) is approximately 9 miles north-northeast of the study area.	Possible
<i>Harmonia hallii</i> Hall's harmonia	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 305 and 975 meters. Known from COL, LAK, NAP, and YOL counties.	(March) April-June annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #30700) is approximately 9.5 miles east-northeast of the study area.	Possible
<i>Harmonia nutans</i> noddling harmonia	Fed: None CA: None CEQA: 4.3	Occurs on gravelly or rocky volcanic soils in chaparral and cismontane woodland at elevations between 75 and 975 meters. Known from LAK, NAP, SOL, SON, and YOL counties.	March-May annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest herbarium record (Bacigulpi, Robbins and Chisaki 5587, from 1956) is approximately 4.5 miles to the east-southeast just west of Mt. St. Helena.	Possible
<i>Hemizonia congesta</i> subsp. <i>congesta</i> congested-headed hayfield tarplant	Fed: None CA: None CEQA: 1B.2	Occurs in valley and foothill grassland, sometimes on roadsides, at elevations between 20 and 560 meters. Known from LAK, MEN, MRN, SFO, SMT, and SON counties.	April-November annual herb	Suitable vegetation associations and serpentine soils are present in the study area, and the nearest CNDDDB occurrence (EONDX #109821) is approximately 6.1 miles south at Pepperwood.	Possible

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<i>Hesperevax caulescens</i> hogwallow starfish	Fed: None CA: None CEQA: 4.2	Occurs in mesic, clay valley and foothill grassland and shallow vernal pools sometimes on alkaline soils at elevations between 0 and 505 meters. Known from ALA, BUT, CCA, COL, FRE, GLE, KRN, MER, MNT, MPA, SAC, SDG, SJQ, SLO, SOL, SON, STA, SUT, TEH, TUO, YOL, and YUB counties.	March-June annual herb	Suitable vegetation associations are present in the study area, but no vernal pools are on site and no alkaline soils are present. The nearest herbarium record (Baker s.n., from 1927) is approximately 5.2 miles south.	Not Expected
<i>Hesperolinon adenophyllum</i> glandular western flax	Fed: None CA: None CEQA: 1B.2	Occurs (usually) on serpentine substrates in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 150 and 1,315 meters. Known from LAK and MEN counties.	May-August annual herb	Suitable vegetation associations and serpentine soils are present in the study area, and the nearest CNDDB occurrence (EONDX #18597) is approximately 7.3 miles north.	Possible
<i>Hesperolinon bicarpellatum</i> two-carpellate western flax	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 60 and 1,005 meters. Known from LAK, NAP, and SON counties.	(April) May-July annual herb	Suitable vegetation and soil (serpentine) associations are present in the study area, and the nearest CNDDB occurrence (EONDX #31000) is approximately 4.7 miles northeast.	Possible
<i>Hesperolinon sharsmithiae</i> Sharsmith's western flax	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 270 and 300 meters. Known from LAK and NAP counties.	May-July annual herb	Suitable vegetation and soil (serpentine) associations are present in the study area, and the nearest CNDDB occurrence (EONDX #93573) is approximately 12.5 miles east.	Possible
<i>Horkelia bolanderi</i> Bolander's horkelia	Fed: None CA: None CEQA: 1B.2	Occurs in edges and vernal mesic substrates within chaparral, lower montane coniferous forest, meadows and seeps, and valley and foothill grassland at elevations between 450 and 1100 meters. Known from MEN, LAK, and COL counties.	(May) June-August perennial herb	Suitable vegetation and soil (mesic substrates) associations are present in the study area, but the nearest CNDDB occurrence (EONDX #12099) is approximately 10.2 miles north. A record on the property would be a range extension south.	Not Expected
<i>Hosackia gracilis</i> harlequin lotus	Fed: None CA: None CEQA: 4.2	Occurs in 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, and valley and foothill grassland at elevations between 0 and 700 meters. Known from DNT, HUM, MEN, MNT, MRN, SCL, SCR, SFO, SLO, SMT, and SON counties.	March-July perennial rhizomatous herb	Suitable vegetation associations (seeps) are present in the study area, but the nearest herbarium record (Heller 7471, from 1902) is approximately 10.5 miles southwest from "near Windsor."	Not Expected

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<i>Imperata brevifolia</i> California satintail	Fed: None CA: None CEQA: 2B.1	Occurs in mesic chaparral, coastal scrub, Mojavean desert scrub, (often alkali) meadows and seeps, and riparian scrub at elevations below 1,215 meters. Known from BUT, FRE, IMP, INY, KRN, LAK, LAX, ORA, RIV, SBD, SDG, TEH, TUL, and VEN counties. Presumed extirpated from LAK county. Records from BUT, TEH, and LAK counties may represent escapes from ornamental plantings.	September-May perennial rhizomatous herb	Suitable vegetation associations (seeps) are present in the study area, but the nearest herbarium record (Norman, Michener, and Bioletti 136, from 1893) is from near Fresno, over 200 miles southeast.	Not Expected
<i>Juncus luciensis</i> Santa Lucia dwarf rush	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, Great Basin scrub, lower montane coniferous forest, meadows and seeps, and vernal pools at elevations between 300 and 2,040 meters. Known from LAS, MNT, MOD, NAP, NEV, PLA, PLU, RIV, SBA, SBT, SDG, SHA, and SLO counties.	April-July annual herb	Suitable vegetation and soil (mesic substrates) associations are present in the study area, and the nearest CNDDB occurrence (EONDX #76231) is approximately 10.5 miles east in Bear Valley area. This would be a range extension if found on site.	Not Expected
<i>Layia septentrionalis</i> Colusa layia	Fed: None CA: None CEQA: 1B.2	Occurs on sandy, serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 100 and 1,095 meters. Known from BUT, COL, GLE, LAK, MEN, NAP, SON, SUT, TEH, and YOL counties.	April-May annual herb	Suitable vegetation associations and serpentine soils are present in the study area. The nearest CNDDB occurrence (EONDX #19667) is approximately 5.2 miles north.	Possible
<i>Legenere limosa</i> legenere	Fed: None CA: None CEQA: 1B.1	Occurs in vernal pools at elevations between 1 and 880 meters. Known from ALA, LAK, MNT, NAP, PLA, SAC, SCL, SHA, SJQ, SMT, SOL, SON, STA, TEH, and YUB counties.	April-June annual herb	It is possible that ephemeral standing water could be present on site but vernal pools are not present in the study area. The nearest CNDDB occurrence (EONDX #17386) is approximately 10.3 miles north at the "southern end of Boggs Lake."	Not Expected
<i>Leptosiphon aureus</i> bristly leptosiphon	Fed: None CA: None CEQA: 4.2	Occurs in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland at elevations between 55 and 1,500 meters. Known from ALA, BUT, COL, HUM, KRN, LAK, MEN, MRN, NAP, PLA, SBT, SCL, SCR, SMT, SOL, SON, and YUB counties.	April-July annual herb	Suitable vegetation associations are present in the study area. The nearest collection (Neilson 3457, from 1975) is approximately 6.9 miles north to the west of Forest Lake. This species is also recorded on a CalFlora checklist (record #gr14127) for the property.	Possible

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Leptosiphon grandiflorus</i> large-flowered leptosiphon	Fed: None CA: None CEQA: 4.2	Occurs in (usually) sandy substrates in coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal dunes, coastal prairie, coastal scrub, and valley and foothill woodland at elevations between 5 and 1,220 meters. Known from ALA, CCA, HUM, KRN, LAK, MRN, MEN, MER, MNO, MNT, SBT, SDG, SFO, SLO, SMT, SBA, SCL, SCR, SON, and STA counties. Presumed extirpated from SBA county.	April-August annual herb	Suitable vegetation associations are present in the study area, but the nearest collection (Milo Baker s.n., from 1899) is approximately 27 miles southwest “near Valley Ford”. There is only one herbarium collection north of the one mentioned above, and that collection is from near the city of Willets.	Not Expected
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	Fed: None CA: None CEQA: 1B.2	Occurs usually on volcanic soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 100 and 500 meters. Known from LAK, NAP, SOL, SON, and YOL counties.	March-May annual herb	Suitable vegetation and soil (volcanic) associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #82526) is approximately 3.4 miles west.	Possible
<i>Leptosiphon latisectus</i> broad-lobed leptosiphon	Fed: None CA: None CEQA: 4.3	Occurs in broadleafed upland forest and cismontane woodland at elevations between 170 and 1,500 meters. Known from COL, DNT, HUM, LAK, MRN, MEN, MNT, NAP, SBT, SFO, SMT, SHA, SON, TEH, TRI, and YOL counties.	April-June annual herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (Schemske 1C, from 1993) is approximately 8.5 miles south from Pepperwood Preserve.	Possible
<i>Lessingia hololeuca</i> woolly-headed lessingia	Fed: None CA: None CEQA: 3	Occurs on clay and serpentine soils in broadleafed upland forest, coastal scrub, lower montane coniferous forest, and valley and foothill grassland at elevations between 15 and 305 meters. Known from ALA, FRE, MEN, MNT, MRN, NAP, SCL, SCR, SDG, SMT, SOL, SON, TEH, TUO, and YOL counties.	June-October annual herb	Suitable vegetation and soil (serpentine) associations are present in the study area. The nearest herbarium record (Crampton 7153, from 1964) is approximately 10.5 miles southeast near Tubbs Lane in Calistoga.	Possible
<i>Lilium rubescens</i> redwood lily	Fed: None CA: None CEQA: 4.2	Occurs on serpentine (sometimes) soils in broadleafed upland forest, chaparral, lower montane coniferous forest, North Coast coniferous forest, and upper montane coniferous forest at elevations between 30 and 1,910 meters. Known from CCA, DNT, GLE, HUM, MEN, NAP, SHA, SIS, SON, and TRI counties.	April-August (September) perennial bulbiferous herb	Suitable vegetation and soil (serpentine) associations are present in the study area, and the nearest herbarium record (Clifton s.n., from 1983) is approximately 6.5 miles north from Alder Creek.	Possible
<i>Limnanthes floccosa</i> subsp. <i>floccosa</i> woolly meadowfoam	Fed: None CA: None CEQA: 4.2	Occurs in vernal mesic chaparral, cismontane woodland, valley and foothill grassland, and vernal pools at elevations between 60 and 1,335 meters. Known from BUT, LAK, LAS, NAP, SHA, SIS, TEH, and TRI counties.	March-May (June) annual herb	It is possible that ephemeral standing water could be present on site but vernal pools are not present in the study area. The nearest herbarium record (Hrusa 12826a, from 1996) is approximately 10.8 miles southeast at “Summit of Palisades in Cub Valley.”	Not Expected

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Lomatium hooveri</i> Hoover's lomatium	Fed: None CA: None CEQA: 4.3	Occurs on serpentine and rarely volcanic soils in chaparral and cismontane woodland at elevations between 300 and 885 meters. Known from COL, LAK, NAP, and YOL counties.	April-July perennial herb	Suitable vegetation associations and soil are present but the nearest herbarium record (Nelson 2328, from 1976) is approximately 17 miles east along Morgan Valley Road. Finding the species here would be a western range extension.	Not Expected
<i>Lomatium repostum</i> Napa lomatium	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral and cismontane woodland at elevations between 90 and 1,030 meters. Known from LAK, NAP, SOL, and SON counties.	March-June perennial herb	Suitable vegetation and soil (serpentine) associations are present in the study area, and the nearest herbarium record (Clifton s.n., from 1983) is approximately 6.5 miles north from near Lee Creek. This species is recorded on a CalFlora checklist (record #gr14127) for the property.	Possible
<i>Lupinus sericatus</i> Cobb Mountain lupine	Fed: None CA: None CEQA: 1B.2	Occurs in broadleafed upland forest, chaparral, cismontane woodland, and lower montane coniferous forest at elevations between 275 and 1,525 meters. Known from COL, LAK, NAP, and SON counties.	March-June perennial herb	Suitable vegetation associations are present in the study area, and the nearest CNDDB occurrence (EONDX #30920) is approximately 1.8 miles east.	Possible
<i>Microseris paludosa</i> marsh microseris	Fed: None CA: None CEQA: 1B.2	Occurs in cismontane woodland, closed-cone coniferous forest, coastal scrub, and valley and foothill grassland at elevations between 5 and 355 meters. Known from MEN, MNT, MRN, SCR, SFO, SLO, SMT, SOL, and SON counties.	April-June (July) perennial herb	Suitable vegetation associations are present in the study area, and the nearest CNDDB occurrence (EONDX #53648) is approximately 6.1 miles south at Pepperwood.	Possible
<i>Mielichhoferia elongata</i> elongate copper moss	Fed: None CA: None CEQA: 4.3	Occurs in broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, and subalpine coniferous forest on acidic (usually), carbonate (sometimes), metamorphic, and vernal mesic (usually) substrates, often on roadsides, at elevations between 0 and 1960 meters. Known from SIS, HUM, TRI, LAK, BUT, PLU, SIE, NEV, PLA, TUO, MPA, MRN, SCL, SMT, SCR, MNT, SLO, FRE, TUL, and MPA counties.	moss	Suitable vegetation associations (seeps) are present in the study area. The nearest herbarium record (Toren s.n., from 1998) is approximately 1.25 miles northeast from "Anderson Springs, near Cobb Mt.".	Possible
<i>Monardella viridis</i> green monardella	Fed: None CA: None CEQA: 4.3	Occurs in broadleafed upland forest, chaparral, and cismontane woodland at elevations between 100 and 1,010 meters. Known from LAK, LAX, MEN, NAP, and SON counties.	June-September perennial rhizomatous herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (LaPré s.n., from 1985) is approximately 1,600 feet north.	Possible

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Navarretia cotulifolia</i> cotula navarretia	Fed: None CA: None CEQA: 4.2	Occurs on adobe soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 4 and 1,830 meters. Known from LAK, MRN, NAP, SON, and YOL counties. May occur in SIS county.	May-June annual herb	Although suitable vegetation associations are present in the study area, the required adobe soils are absent. The nearest herbarium record (Amezcua 19, from 1995) is approximately 7.3 miles east-northeast of the study area north of Midletown.	Not Expected
<i>Navarretia jepsonii</i> Jepson's navarretia	Fed: None CA: None CEQA: 4.3	Occurs on serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland at elevations between 175 and 855 meters. Known from COL, LAK, NAP, SLO, and YOL counties.	April-June annual herb	Suitable vegetation associations and serpentine soils are present in the study area, and the nearest collection (Mason 12595, from 1945) is approximately 8.5 miles east "just below bridge E of Middletown."	Possible
<i>Navarretia leucocephala</i> subsp. <i>bakeri</i> Baker's navarretia	Fed: None CA: None CEQA: 1B.1	Occurs in mesic cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools at elevations between 5 and 1,740 meters. Known from COL, GLE, HUM, LAK, LAS, MEN, MRN, NAP, SOL, SON, SUT, TEH, and YOL counties. May be more widespread.	April-July annual herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #21812) is approximately 8.9 miles east-northeast. However, vernal pools are not present.	Not Expected
<i>Navarretia myersii</i> subsp. <i>deminuta</i> small pincushion navarretia	Fed: None CA: None CEQA: 1B.1	Occurs on clay and loam soils in vernal pools at elevations of approximately 355 meters. Known from one occurrence in LAK county.	April-May annual herb	Vernal pools are not present in the study area.	None
<i>Navarretia paradoxinota</i> Porter's navarretia	Fed: None CA: None CEQA: 1B.3	Occurs on serpentine soils in vernal mesic openings of meadows and seeps and often in drainages at elevations between 165 and 840 meters. Known from COL, LAK, and NAP counties.	May-June (July) annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #111455) is approximately 6.9 miles east.	Possible
<i>Orobancha valida</i> subsp. <i>howellii</i> Howell's broomrape	Fed: None CA: None CEQA: 4.3	Occurs on serpentine and volcanic soils in chaparral at elevations between 180 and 1,740 meters. Known from LAK county. Generally parasitic on <i>Garrya</i> spp.	June-September perennial herb (parasitic)	Suitable vegetation and soil (serpentine) associations are present in the study area, and the nearest herbarium record (Clifton s.n., from 1984) is approximately 7.6 miles north.	Possible
<i>Penstemon newberryi</i> var. <i>sonomensis</i> Sonoma beardtongue	Fed: None CA: None CEQA: 1B.3	Occurs in rocky chaparral at elevations between 700 and 1,370 meters. Known from LAK, NAP, and SON counties.	April-August perennial herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #30687) is approximately 4.7 miles north.	Possible

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<i>Perideridia gairdneri</i> subsp. <i>gairdneri</i> Gairdner's yampah	Fed: None CA: None CEQA: 4.2	Occurs on vernal mesic substrates in broadleaved upland forest, chaparral, coastal prairie, valley and foothill grassland, and vernal pools at elevations between 0 and 610 meters. Known from DNT, KRN, MRN, MEN, MNT, SLO, SMT, SCL, SCR, SOL, and SON counties.	June-October perennial herb	Suitable vegetation associations are present in the study area, but not vernal mesic substrates or vernal pools. The nearest herbarium collection (Rutzbiff 752, from 1951) is approximately 15 miles southwest.	Not Expected
<i>Puccinellia simplex</i> California alkali grass	Fed: None CA: None CEQA: 1B.2	Occurs on alkaline soils in vernal mesic chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools, and sinks, flats, and lake margins at elevations between 2 and 930 meters. Known from ALA, BUT, CCA, COL, FRE, GLE, KNG, KRN, LAK, LAX, MAD, MER, NAP, SBD, SCL, SCR, SLO, SOL, STA, TUL, and YOL counties.	March-May annual herb	Although suitable vegetation associations are present in the study area, the required alkali soils are absent.	Not Expected
<i>Ranunculus lobbii</i> Lobb's aquatic buttercup	Fed: None CA: None CEQA: 4.2	Occurs in mesic cismontane woodland, North Coast coniferous forest, valley and foothill grassland, and vernal pools at elevations between 15 and 470 meters. Known from ALA, CCA, LAK, MEN, MNT, MRN, NAP, SAC, SCL, SCR, SMT, SOL, and SON counties.	February-May annual herb (aquatic)	Suitable vegetation associations are present in the study area, and the nearest herbarium collection (Stone and Davilla 654, from 1985) is approximately 5.1 miles south.	Possible
<i>Ribes victoris</i> Victor's gooseberry	Fed: None CA: None CEQA: 4.3	Occurs in shady, mesic broadleaved upland forest and chaparral at elevations between 100 and 750 meters. Known from NAP county.	March-April perennial deciduous shrub	Suitable vegetation associations are present in the study area, and the nearest herbarium collection (Jepson 13507, from 1893) is approximately 6 miles east.	Possible
<i>Sidalcea hickmanii</i> subsp. <i>napensis</i> Napa checkerbloom	Fed: None CA: None CEQA: 1B.1	Occurs on rhyolitic soils in chaparral at elevations between 415 and 610 meters. Known from two occurrences in NAP and SON counties.	April-June perennial herb	Suitable vegetation associations are present in the study area but required rhyolite soil is absent. The nearest CNDDDB occurrence (EONDX #75952) is over 26 miles to the southeast.	Not Expected
<i>Sidalcea oregana</i> subsp. <i>hydrophila</i> marsh checkerbloom	Fed: None CA: None CEQA: 1B.2	Occurs in mesic meadows and seeps and riparian forest at elevations between 1,100 and 2,300 meters. Known from COL, GLE, LAK, MEN, and NAP counties. Can intergrade with subsp. <i>valida</i> .	(June) July-August perennial herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #543) is approximately 7.4 miles north.	Possible
<i>Spergularia macrotheca</i> var. <i>longistyla</i> long-styled sand-spurrey	Fed: None CA: None CEQA: 1B.2	Occurs on alkaline soils in marshes and swamps and meadows and seeps at elevations between 0 and 255 meters. Known from ALA, CCA, NAP, and SOL counties.	February-May perennial herb	Suitable vegetation associations and soil are present in the study area but the required alkaline soils are absent, and the nearest CNDDDB occurrence (EONDX #109320) is approximately 10.5 miles southeast.	Not Expected

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Streptanthus barbiger</i> bearded jewelflower	Fed: None CA: None CEQA: 4.2	Occurs in chaparral on serpentine soils at elevations between 150 and 1,070 meters. Known from COL, LAK, and SON counties.	May-July annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest herbarium record (Stone and Clifton 549, from 1983) is approximately 2.3 miles north.	Possible
<i>Streptanthus brachiatus</i> subsp. <i>brachiatus</i> Socrates Mine jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs usually on serpentine soils in chaparral and closed-cone coniferous forest at elevations between 545 and 1,000 meters. Known from fewer than ten occurrences in LAK, NAP, and SON counties. Plants from LAL county are more appropriately assigned to <i>S. brachiatus</i> subsp. <i>hoffmanii</i> .	May-June perennial herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #4498) is approximately 1.65 miles north.	Possible
<i>Streptanthus brachiatus</i> subsp. <i>hoffmanii</i> Freed's jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral and cismontane woodland at elevations between 490 and 1,220 meters. Known from approximately ten occurrences in LAK and SON counties.	May-July perennial herb	Suitable vegetation associations are present in the study area and this species is recorded as occurring on the property (EONDX #45165), last updated in 2011.	Present
<i>Streptanthus glandulosus</i> subsp. <i>hoffmanii</i> Hoffman's bristly jewelflower	Fed: None CA: None CEQA: 1B.3	Occurs in chaparral, cismontane woodland, and valley and foothill grasslands on rocky and serpentine (often) substrates at elevations between 120 and 475 meters. Known from MEN, LAK and SON counties.	March-July annual herb	Suitable vegetation associations are present in the study area and this species is recorded as occurring on the property (EONDX #120908 & 120909), last updated in 2021.	Present
<i>Streptanthus hesperidis</i> green jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on rocky, serpentine soils in chaparral openings and cismontane woodland at elevations between 130 and 760 meters. Known from LAK, NAP, and YOL counties.	May-July annual herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #49261) is approximately 6.7 miles northeast.	Possible
<i>Streptanthus morrisonii</i> subsp. <i>elatus</i> Three Peaks jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral at elevations between 90 and 815 meters. Known from LAK and NAP counties.	June-September perennial herb	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #95212) is approximately 8.1 miles east.	Possible
<i>Streptanthus vernalis</i> early jewelflower	Fed: None CA: None CEQA: 1B.2	Occurs on serpentine soils in chaparral and closed-cone coniferous forest at elevations of approximately 610 meters. Known from one occurrence in LAK county.	March-May annual herb	Suitable vegetation associations and soil are present in the study area. However, the only CNDDDB occurrence (EONDX #75518) is approximately 8.5 miles east.	Not Expected
<i>Stuckenia filiformis</i> subsp. <i>alpina</i> northern slender pondweed	Fed: None CA: None CEQA: 2B.2	Occurs in shallow freshwater marshes and swamps at elevations between 300 and 2,150 meters. Known from ALA, BUT, CCA, ELD, LAS, MER, MNO, MOD, MPA, PLA, SCL, SHA, SIE, SIS, SMT, SOL, and SON counties. To be expected in the San Joaquin Valley, San Francisco Bay area, and the central high Sierra Nevada.	May-July perennial rhizomatous herb (aquatic)	Suitable vegetation associations and soil are present in the study area, and the nearest CNDDDB occurrence (EONDX #74341) is approximately 5.2 miles southeast.	Possible

SPECIES NAME COMMON NAME	FEDERAL, STATE, CRPR RANK ¹	HABITAT PREFERENCES, DISTRIBUTION INFORMATION, & ADDITIONAL NOTES*	FLOWERING PHENOLOGY/ LIFE FORM	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Trichostema ruygtii</i> Napa bluecurls	Fed: None CA: None CEQA: 1B.2	Occurs in chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland, and vernal pools at elevations between 30 and 680 meters. Known from LAK, NAP, SOL, and SON counties.	June-October annual herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #77691) is approximately 8.1 miles east.	Possible
<i>Trifolium hydrophilum</i> saline clover	Fed: None CA: None CEQA: 1B.2	Occurs in marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations between 0 and 300 meters. Known from ALA, CCA, LAK, MEN, MNT, NAP, SAC, SBT, SCL, SCR, SJQ, SLO, SMT, SOL, SON, and YOL counties. Many sites likely extirpated.	April-June annual herb	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #84604) is approximately 8.1 miles east.	Possible
<i>Triteleia lugens</i> dark-mouthed triteleia	Fed: None CA: None CEQA: 4.3	Occurs in broadleaved upland forest, chaparral, coastal scrub, and lower montane coniferous forest at elevations between 100 and 1,000 meters. Known from NAP, SBT, SOL, and SON counties.	April-June perennial bulbiferous herb	Suitable vegetation associations are present in the study area, and the nearest herbarium record (Nelson 4074, from 1982) is approximately 3.8 miles northeast.	Possible
<i>Viburnum ellipticum</i> oval-leaved viburnum	Fed: None CA: None CEQA: 2B.3	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest at elevations between 215 and 1,400 meters. Known from ALA, CCA, ELD, FRE, GLE, HUM, LAK, MEN, NAP, PLA, SHA, SOL, SON, and TEH counties.	May-June perennial deciduous shrub	Suitable vegetation associations are present in the study area, and the nearest CNDDDB occurrence (EONDX #49961) is approximately 6.1 miles south at Pepperwood.	Possible

¹Explanation of State and Federal Listing Codes

Federal listing codes:

FE Federally listed as Endangered
 FT Federally listed as Threatened
 FPE Federally proposed for listing as Endangered
 FPT Federally proposed for listing as Threatened
 FPD Federally proposed for delisting
 FC Federal candidate species (former Category 1 candidates)
 SC Species of Concern – No longer maintained by USFWS

California listing codes:

SE State listed as Endangered
 ST State listed as Threatened
 SR State listed as Rare
 SCE State candidate for listing as Endangered
 SCT State candidate for listing as Threatened

California Rare Plant Rank codes:

1A Presumed extinct in California
 1B Rare or Endangered in California and elsewhere
 2 Rare or Endangered in California, more common elsewhere
 3 Plants for which we need more information - Review list
 4 Plants of limited distribution - Watch list

California Rare Plant Rank threat codes:

.1 Seriously Endangered in California (over 80% of occurrences Threatened / high degree and immediacy of threat)
 .2 Moderately Endangered in California (20-80% occurrences Threatened)
 .3 Not very Endangered in California (<20% of occurrences Threatened or no current threats known)

Survey Recommendation Determinations Based On

- Observed phenology at the time of reconnaissance
- Seasonal weather patterns
- Collection dates of herbarium specimens
- Blooming times given by the CNPS Inventory

Abbreviations

AMA	Amador	MEN	Mendocino	SCZ	Santa Cruz Island
BUT	Butte	MER	Merced	SDG	San Diego
CAL	Calaveras	MNT	Monterey	SFO	San Francisco
CCA	Contra Costa	MPA	Mariposa	SHA	Shasta
CNPS	CA Native Plant Society	MRN	Marin	SIE	Sierra
CRPR	California Rare Plant Rank	NAP	Napa	SIS	Siskiyou
COL	Colusa	NEV	Nevada	SJQ	San Joaquin
DNT	Del Norte	ORA	Orange	SMI	San Miguel Island
ELD	El Dorado	PLA	Placer	SMT	San Mateo
FRE	Fresno	PLU	Plumas	SOL	Solano
GLE	Glenn	RIV	Riverside	SON	Sonoma
HUM	Humboldt	SAC	Sacramento	SRO	Santa Rosa Island
KRN	Kern	SBA	Santa Barbara	TEH	Tehama
LAK	Lake	SBD	San Bernardino	TRI	Trinity
LAS	Lassen	SBT	San Benito	TUL	Tulare
LAX	Los Angeles	SCL	Santa Clara	VEN	Ventura
MAD	Madera	SCR	Santa Cruz	YOL	Yolo
MOD	Modoc	SCT	Santa Catalina Island	YUB	Yuba

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
FEDERAL/STATE LISTED, PROPOSED, CANDIDATE AND/OR FULLY PROTECTED SPECIES				
INVERTEBRATES:				
<i>Bombus occidentalis</i> western bumble bee	SC	A medium-sized (1-2 cm) bumble bee with a short head. The abdomen is color variable, but all individuals have a transverse band of yellow hair on the thorax in front of the wing bases, and the tip of the abdomen is almost always white. Western Bumble Bee lives in a diverse range of habitats, including mixed woodlands, farmlands, urban areas, montane meadows and into the western edge of the prairie grasslands. Like many bumble bees, it typically nests underground in abandoned rodent burrows or within hollows in decaying wood (COSEWIC 2014). Widespread use of pesticides in agricultural lands and habitat fragmentation are thought to have led to severe declines of the species.	The nearest CNDDDB occurrence (EONDX #99715) was recorded in 1960 at Cobb Mountain, approximately 3.8 miles north of the treatment areas. Although suitable habitat may be present in grassland and scrub portions of the treatment areas; however, there have been no recent occurrences of western bumble bee anywhere in the greater San Francisco Bay Area (Bumble Bee Watch 2023), and the species is thought to be extirpated from the region (Hatfield and Jepsen 2021)	Not Expected
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	FC	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Host plant is the milkweed (<i>Asclepius</i> spp.). Lifespan reaches >9 months. Fall migration occurs from August-October. Overwintering roosts in California commonly occur on Eucalyptus trees.	The treatment areas lack any suitable wind-protected tree groves within one kilometer of the coast.	None
<i>Syncaris pacifica</i> California freshwater shrimp	FE SE	Inhabits low elevation (<380 feet) perennial and intermittent freshwater streams with structurally diverse pools and streambanks below 380 feet. Requires high water quality with minimal pollution and high oxygen content. The shrimp is endemic to Marin, Napa and Sonoma counties and is currently known from 17 coastal streams including Lagunitas, Walker, Stemple, Salmon, Austin, Green Valley, Laguna de la Santa Rosa, Huichica and Sonoma creeks and the Napa River (USFWS 1998).	The nearest CNDDDB occurrences (EONDX #41763) was recorded in 1999 in Granz Creek, approximately 8.5 miles south of the treatment areas. Suitable habitat is present within the treatment areas in McDonnell Creek, though the treatment areas are outside of the species' known range.	Not Expected
FISH:				

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Oncorhynchus kisutch</i> pop. 4 coho salmon - central California coast ESU	FE SE	The coho salmon is an anadromous fish that spend several years in the ocean; returning to freshwater rivers and tributaries to spawn and rear. The Central California Coast ESU listing includes all naturally spawned anadromous steelhead populations below natural and manmade impassable barriers in California streams from the Russian River (inclusive) to Aptos Creek (inclusive), and the drainages of San Francisco, San Pablo, and Suisun Bays eastward to Chipps Island at the confluence of the Sacramento and San Joaquin Rivers (70 FR 37160). Tributary streams to Suisun Marsh including Suisun Creek, Green Valley Creek, and an unnamed tributary to Cordelia Slough (commonly referred to as Red Top Creek), excluding the Sacramento-San Joaquin River Basin, as well as two artificial propagation programs: the Don Clausen Fish Hatchery, and Kingfisher Flat Hatchery/ Scott Creek (Monterey Bay Salmon and Trout Project) steelhead hatchery programs (70 FR 37160).	The nearest CNDDDB occurrence (EONDX #10186) was recorded in 2017 in Dry Creek and its tributaries, approximately 8.5 miles southwest of the treatment areas. Suitable spawning and juvenile rearing habitat is present in the streams within the treatment areas.	Possible
<i>Oncorhynchus mykiss irideus</i> pop. 8 steelhead - central California coast DPS	FT	An anadromous fish that spend several years in the ocean; returning to freshwater rivers to spawn and rear. Listing includes all naturally spawned anadromous steelhead populations (and their progeny) below natural and manmade impassable barriers in the Sacramento and San Joaquin Rivers and their tributaries, excluding steelhead from San Francisco and San Pablo Bays and their tributaries, as well as two artificial propagation programs: the Coleman NFH, and Feather River Hatchery steelhead hatchery programs (70 FR 37160). Designated critical habitat encompasses 2,308 miles streams, 254 square miles estuary habitat in Tehama, Butte, Glenn, Shasta, Yolo, Sacramento, Solano, Yuba, Sutter, Placer, Calaveras, San Joaquin, Stanislaus, Tuolumne, Merced, Alameda, Contra Costa counties (70 FR 52488). The North Diablo Range watershed and South San Francisco Bay entire unit were excluded from the designation based on their potential economic impact (70 FR 52488). Primary constituent elements include: (1) freshwater spawning sites, (2) freshwater rearing sites, (3) freshwater migration corridors free of obstructions, (4) estuarine areas free of obstructions, and (5) nearshore marine areas free of obstructions (70 FR 52488).	The nearest CNDDDB occurrence (EONDX #79273) was recorded in 2004 in the southern portion of the treatment areas at the confluence of McDonnell and Ingalls Creeks. Suitable spawning and juvenile rearing habitat is present in the streams within the treatment areas.	Possible
AMPHIBIANS:				

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Rana draytonii</i> California red-legged frog	FT SSC	A medium-sized frog that inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation (Jennings and Hayes 1994, Bulger et al. 2003, Stebbins 2003).	The nearest CNDDB occurrence (EONDX #119850) was recorded in 1945 near Cobb Mountain, approximately 5.3 miles north of the treatment areas. Suitable habitat is present in the streams within the treatment areas, although there have been no recent occurrences of the species in northeastern Sonoma County.	Possible
REPTILES:				
<i>Chelonia mydas</i> green sea turtle	FT	The largest of the hard-shelled sea turtles, the green sea turtle occurs in all of the world's oceans, primary in tropical and subtropical waters. On the Pacific coast, the species is primarily found from southern California to northern Mexico. Upon hatching onshore, green sea turtles move to the open ocean before returning to nearshore foraging grounds in shallow coastal habitats, where they mature to adulthood and spend the remainder of their lives (NOAA 2022).	There is no oceanic or coastal habitat present within the treatment areas.	None
<i>Emys marmorata</i> northwestern pond turtle	FC SSC	Inhabits permanent or nearly permanent bodies of water and low gradient slow-moving streams below 6,000 feet elevation.	The nearest CNDDB occurrence (EONDX #42860) was recorded within the treatment areas in 1998, in Little Sulphur Creek near the treatment area's northern border. Suitable aquatic habitat for this species is present in streams throughout the treatment areas, and they may nest in open grasslands or sparsely vegetated areas near streams within the treatment areas.	Present
BIRDS:				
<i>Agelaius tricolor</i> tricolored blackbird (nesting colony)	BCC SC SSC	Highly colonial species; nest in emergent vegetation within aquatic and riparian habitats. Nesting season is from March to late-August.	The nearest CNDDB occurrence (EONDX #55124) was recorded in 2004 near Middletown, approximately 8.75 miles east of the treatment areas. The species is periodically observed in the region (eBird 2024). The treatment areas generally lack open marsh habitats suitable for breeding.	Not Expected

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Aquila chrysaetos</i> golden eagle	BCC FP	A large diurnal raptor that nests on cliffs and in large trees in open areas. Forages in open terrain including grasslands, deserts, savannahs and early successional stages of forest and shrub habitats (Kochert et al. 2002). A year-round resident in the greater Bay Area. Breeding activities begin in December in California.	The nearest CNDDDB occurrence (EONDX #65750) was recorded in 1986 near Clear Lake, approximately 16.5 miles northeast of the treatment areas. Suitable nesting habitat is present in large trees within the treatment areas and in the steep cliffs immediately east of the treatment areas.	Possible
<i>Elanus leucurus</i> white-tailed kite	FP	Inhabits grasslands, agriculture fields, oak woodlands, savannah and riparian habitats in rural and urban areas. Typically nests in trees surrounded by open foraging habitat.	The nearest CNDDDB occurrence (EONDX #6468) was recorded in 1985 near Healdsburg, approximately 6.9 miles southwest of the treatment areas. Suitable nesting habitat is present in trees throughout the treatment areas, and the species may forage in grasslands within the treatment areas.	Possible
<i>Falco peregrinus anatum</i> American peregrine falcon	BCC FP	Nest on cliffs, rocky outcrops, bare ground and man-made structures such as bridges, buildings and other tall, prominent structures (Baicich and Harrison 2005). They feed primarily on birds; however, they may also consume many small mammals including bats and various rodents.	The nearest CNDDDB occurrence (EONDX #45627) was recorded in 2001 somewhere within the Detert Reservoir quadrangle, though due to the sensitivity of the species the exact location is suppressed. Suitable nesting habitat is present in the steep cliffs immediately east of the treatment areas.	Possible
<i>Haliaeetus leucocephalus</i> bald eagle	BCC SE FP	Winters at lakes, reservoirs, river systems and some rangelands and coastal wetlands. Nests in large conifers near aquatic sources. Breeding begins in May; single-brooded (Baicich and Harrison 2005).	The nearest CNDDDB occurrence (EONDX #46398) was recorded in 2000 at McCreary Lake, approximately 11.5 miles east of the treatment areas. Suitable nesting habitat is present in trees throughout the treatment areas, although habitat is marginal because there are no large open bodies of water preferred by the species near to the treatment areas.	Not Expected
<i>Strix occidentalis caurina</i> northern spotted owl	FT SSC	Inhabits coniferous forests from western British Columbia to the San Francisco Bay. In California owls inhabit Douglas fir mixed conifer and coastal redwood forests. Requires moderate to high canopy cover with sufficient large dead or dying trees/snags and abundant arboreal or semiarboreal prey base. Breeding begins in April; single-brooded.	The nearest CNDDDB occurrence (Activity Center SON0025, CDFW 2024) was recorded near Mount Saint Helena as recently as 2012, approximately 4 miles southeast of the treatment areas. Marginally suitable nesting habitat is present in the forest and woodland habitats within the treatment areas, although no large coniferous forests typically used by the species are present.	Not Expected
MAMMALS:				

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Bassariscus astutus raptor</i> northern California ringtail	FP	A small, nocturnal carnivore that feeds on arthropods, rodents, lizards, amphibians, small birds and a variety of fruits and berries. Inhabits a variety of areas from riparian, montane and coniferous woodlands, chaparral, desert and tropical habitats with rocky outcroppings, canyons, or talus slopes near open water up to 1,400 meters (Poglayen-Neuwall and Toweill 1988). This subspecies is thought to occur from the Coast Ranges to the Sierras from Oregon to Ventura County, California. Breeding season occurs from February to May. Dens in rocky areas in crevices, tree hollows, dens made by other animals, and manmade structures in rural /suburban areas; relocates to new denning site every few days.	Although CNDDD does not track ringtail, this species was observed using a camera station in the treatment area as recently as 2021. Suitable habitat is present in woodlands and riparian zones within the treatment areas.	Present
SENSITIVE AND LOCALLY RARE SPECIES				
INVERTEBRATES:				
<i>Bombus caliginosus</i> obscure bumble bee	SA	Occurs along the Pacific Coast from southern California to southern British Columbia, with scattered records from the east side of California's Central Valley.	Although suitable habitat may be present within the treatment areas, the species has not been identified in the county in at least twenty years (Bumble Bee Watch 2024). There are two CNDDDB occurrences of the species within the assessment area, the most recent of which is from 1971 and located 16 miles southwest of the treatment areas in Guerneville (EONDX #97403).	Not Expected
<i>Bombus pensylvanicus</i> American bumble bee	SA	A highly adaptable, generalist forager primarily associated with open habitats such as temperate grasslands, forest edges and meadows, and semi-arid/arid desert. Requires suitable nesting sites, nectar and pollen resources during the spring, summer, and fall, and suitable overwintering sites for mated females. Nests primarily in open grasslands and farmland near foraging resources on the surface of the ground, but will opportunistically nest in pre-existing burrows and cavities in stumps and logs. Females overwinter in undisturbed areas close to the ground surface in loose soil or under leaf litter and debris (Tyler 2021).	Although suitable habitat may be present within the treatment areas, the species has not been identified in the county in at least twenty years (Bumble Bee Watch 2024). There is one CNDDDB occurrences of the species within the assessment area, it is from 1938 and located 14.3 miles northwest of the treatment areas (EONDX #124044).	Not Expected

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Dubiraphia giulianii</i> Giuliani's dubiraphian riffle beetle	SA	Occurs among vegetation and rocks in slow parts of rivers and possibly creeks. Related species are sensitive to chlorides (Poole and Gentili 1996).	While possibly occurring in creeks, the species is strongly associated with rivers, and is only thought to possibly occur in creeks as relative species do; however, these related species rarely inhabit creeks with significant seasonal variation in flow, and therefore the species is not expected to occur within the treatment areas. There is one historical occurrence of the species within the assessment area, it is from 1948 and located 16.5 miles southwest of the treatment areas (EONDX #60308).	Not Expected
<i>Gonidea angulata</i> western ridged mussel	SA	The western ridged mussel is yellowish-brown to black in color and has an outer shell consisting of two valves reaching up to five inches in length. Once found in coastal basins in from San Diego County to British Columbia and as far east as Idaho, the mussel is now only found in California in rivers north of San Francisco Bay, with the Russian River being the southernmost observation point of the species. Like other freshwater mussels, the western ridged mussel requires abundant, connected aquatic habitats with stable substrates, perennial inundation, and protection from scour and disposition. Specifically, it inhabits rivers with wide floodplains, low slope, large components of sand and gravel substrate, and large boulders (Blevins et al. Selvaggio 2020).	The treatment areas lack a large river with a wide floodplain, and hydrologic connectivity within the treatment areas is limited. There is one occurrence of the species within the assessment area, it is from 2017 and located 15.4 miles southwest of the treatment areas (EONDX #119127).	Not Expected
<i>Linderiella occidentalis</i> California linderiella	SA	Inhabits clear large vernal pools and lakes, but are fairly tolerant of high water temperatures and turbidity. Most common fairy shrimp in the Central Valley.	The treatment areas lack vernal pool and lake habitat.	Not Expected
<i>Stygobromus cherylae</i> Barr's amphipod	SA	Only known from type locality in an unnamed spring box and feeder pipe, just east of Mayacama Creek bridge, beside Highway 128, 19.5 km east of Geyserville, Sonoma County (Wang and Holsinger 2001).	While suitable habitat may be present within the study areas, the species has not been observed outside of its type locality. Its sole observation is from 2001 and located 3.4 miles south of the treatment areas (EONDX #88810).	Not Expected
<i>Trachykele hartmani</i> serpentine cypress wood-boring beetle	SA	Extremely rare Buprestid beetle restricted to cypress trees within serpentine habitat in Lake and Napa Counties.	Treatment areas are outside of the species' known range.	None
FISH:				

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Hesperoleucus venustus navarroensis</i> northern coastal roach (Navarro roach)	SSC	Small, bronzy subspecies of the California roach. Prefers cool pool habitats with low water velocity, most often in mid-elevation stream habitats associated with agricultural land use, rangeland, and development. Can exist in heavily modified or disturbed habitats. Confined to the Navarro River and its tributaries (Baumsteiger et al. 2017).	The nearest CNDDB occurrence (EONDX #42695) was recorded in 1999 in the Russian River at Healdsburg, approximately 8 miles southwest of the treatment areas. Suitable habitat is present in the streams within the treatment areas, including McDonnell and Ingalls Creeks.	Possible
<i>Hysteroecarpus traskii pomo</i> Russian River tule perch	SSC	Small, deep bodied fish confined to the Russian River and its tributaries in Sonoma and Mendocino counties. Requires clear, flowing water and abundant cover. Rarely found in waters exceeding 25 degrees Celsius, except within Clear Lake; this species has a high salinity tolerance.	The nearest CNDDB occurrence (EONDX #42858) was recorded in 1999 in Mayacama Creek near Highway 128, approximately 3.6 miles south of the treatment areas. Suitable habitat is present in the streams within the treatment areas, including McDonnell and Ingalls Creeks.	Possible
<i>Mylopharodon conocephalus</i> hardhead	SSC	A cyprinid fish whose range extends from the Kern River to the Pit River; it is known to occur in the Russian River drainage, and is widely distributed in low- to mid- elevation warmwater (>68 degrees Fahrenheit) streams in the Sacramento-San Joaquin drainage below 1500 meters elevation, but populations are becoming increasingly isolated. Hardhead are typically found in small to large streams in a low to mid-elevation environment and may also inhabit lakes or reservoirs. Most hardhead reach sexual maturity at 3 years and spawn in the spring around April-May, though spawning may take place as late as August. Though spawning may occur in pools, runs, or riffles, the bedding area will typically be characterized by gravel and rocky substrate (CalFish 2016).	The nearest CNDDB occurrence (EONDX #74948) was recorded in 2000 in Sausal Creek near Pine Flat Road, approximately 1.9 miles southwest of the treatment areas. Suitable habitat is present in the streams within the treatment areas, including McDonnell and Ingalls Creeks.	Possible
AMPHIBIANS:				

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Dicamptodon ensatus</i> California giant salamander	SSC	Large, stocky terrestrial salamander. Occur primarily in humid coastal forests from Santa Cruz County to southern Mendocino and Lake Counties. Found near streams in damp conditions; aquatic adults and larvae inhabit cool, rocky streams and occasionally lakes and ponds (Zeiner et al. 1990).	There are two CNDDDB occurrences located within the treatment areas, both of which were recorded in 1996: one in Ingalls Creek in the eastern portion of the site (EONDX #100692) and one in Bluegum Creek on the southern border of the site (EONDX #100691). Furthermore, an occurrence of steelhead (EONDX #79273) recorded in 1999 within the treatment areas at the confluence of McDonnell and Ingalls Creeks also noted the presence of California giant salamander larvae. Suitable habitat is present for this species in stream habitats throughout the treatment areas.	Possible
<i>Rana boylei pop 1</i> foothill yellow-legged frog - northwestern/north coast DPS	SSC	A medium-sized frog that inhabits rocky, cascading streams in woodland, chaparral and coniferous forests from the Oregon border to San Luis Obispo County and the western foothills of the Sierra Nevada below 6000 feet.	There are four CNDDDB occurrences recorded within the treatment areas: 1) EONDX #34565, recorded in 1998 in Little Sulphur Creek in the northern portion of the treatment areas; 2) EONDX #113150, recorded in 1996 in McDonnell Creek near the center of the treatment areas; 3) EONDX #57877, recorded in 2010 at the confluence of McDonnell and Ingalls Creeks in the southern portion of the treatment areas; and 4) EONDX #113103, recorded in 1996 in Bluegum Creek on the southern border of the treatment areas. Suitable habitat is present for this species in streams throughout the treatment areas. Two adults and one egg mass were observed in McDonnell Creek during the April 2023 site visit.	Present

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Taricha rivularis</i> red-bellied newt	SSC	Stream or river-dwellings newt of coastal woodlands and redwood forest. Known from Sonoma County north to Humboldt County and inland to Lake County with a disjunct population occurring in the Stevens Creek watershed of Santa Clara County.	The nearest CNDDDB occurrence (EONDX #104213) was recorded in 1951 in Little Sulphur Creek along Geysers Road, approximately 3 miles northwest of the treatment areas. This occurrence notes that adults were collected in 2012 as well, so may not be entirely historic. Several other occurrences, both historic and more recent, are present in the 9-quadrant search area. Suitable habitat for this species is present in streams throughout the treatment areas. Numerous adults were observed in McDonnell and Ingalls Creeks during the April 2023 site visit.	Present
BIRDS:				
<i>Accipiter striatus</i> sharp-shinned hawk	WL	This species prefers north-facing slopes in dense stands of deciduous, conifer and mixed hardwood trees, including ponderosa pine, black oak, and Jeffrey pines, preferably in riparian areas; also known to nest in suburban areas.	The nearest CNDDDB occurrence (EONDX #24351) was recorded in 1993 near Calistoga, approximately 11 miles southeast of the treatment areas. Suitable habitat is present in woodlands present within the treatment areas, particularly dense woodlands on slopes.	Possible
<i>Ardea herodias</i> great blue heron (nesting colony)	SA	A large wading bird that inhabits a variety of aquatic habitats including shores, tideflats, marshes, swamps, ponds, lakes, rivers and streams. Nests colonially in large trees near water bodies. Breeding begins in March; single-brooded (Baicich and Harrison 2005).	The treatment areas lack associated habitat for colonial roosting; no roosts were observed during reconnaissance. There is one CNDDDB occurrence of this species roosting in the assessment area, it is from 1985 and located 6.3 miles southwest of the treatment areas (EONDX #13051).	Not Expected

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Athene cunicularia</i> burrowing owl	BCC SSC	Valley bottoms and foothills with low vegetation and fossorial mammal activity. Listing includes wintering observations with/without a burrow in San Francisco, Ventura, Sonoma, Marin, Napa and Santa Cruz counties. Breeding begins in March; single-brooded (Baicich and Harrison 2005).	The nearest CNDDDB occurrence (EONDX #70040) was recorded in 2006 in a vineyard near Geyserville, approximately 5.6 miles west of the treatment areas. This occurrence was recorded in December, indicating that it was a wintering individual. There have been no recent breeding records for this species in Sonoma County, though they are observed in the region during wintering and migration. Marginally suitable wintering habitat is present in open grasslands within the treatment areas, though the species is not expected to breed within the treatment areas.	Not Expected
<i>Falco mexicanus</i> prairie falcon	BCC WL	Nests on cliffs and at times in old raven or eagle stick nests on cliff, bluff, or rock outcrops. Inhabits perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub communities.	The nearest CNDDDB occurrences (EONDX #30767 and 26258) were recorded in 1978 and 1979 somewhere within the Detert Reservoir quadrangle, though due to the sensitivity of the species the exact locations are suppressed. Suitable nesting habitat is present in the steep cliffs immediately east of the treatment areas, though foraging habitat onsite is only marginally suitable due to the presence of dense woodlands.	Not Expected
<i>Pandion haliaetus</i> osprey	WL	Inhabits rivers, lakes and coastal habitats. Nest in tall trees near water bodies with sufficient prey. Range is almost cosmopolitan throughout California. Breeding begins in March; single-brooded (Baicich and Harrison 2005).	The nearest CNDDDB occurrence (EONDX #13087) was recorded in 1985 along the Russian River near Healdsburg, approximately 6.1 miles southwest of the treatment areas. Suitable nesting habitat is present in trees throughout the treatment areas, although habitat is marginal because there are no large open bodies of water preferred by the species in the vicinity.	Not Expected

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Progne subis</i> purple martin	SSC	The largest swallow species occurring in North America, the purple martin ranges along the west coast from Big Sur along the Central California Coast north to British Columbia, Canada (Brown 1997). Inhabits montane forests and lowland coastal and inland foothills. Martins exhibit high site fidelity and are secondary-cavity nesters, utilizing woodpecker cavities in trees and dead snags, but also nest in Saguaro cacti, cliffs and man-made structures such as bridges, power poles, street lamps, and bird boxes (Brown 1997). Breeding occurs from April through August and may be double- or triple-brooded (Brown 1997, Baicich and Harrison 2005). Purple martins feed exclusively on flying insects caught on the wing typically 50-150 m (~160-500 ft) above the ground (Brown 1997).	The nearest CNDDDB occurrence (EONDX #71279) was recorded in 2000 in the Mayacamas Mountains, approximately 2.1 miles north of the treatment areas. Suitable nesting habitat is present in trees throughout the treatment areas.	Possible
MAMMALS:				
<i>Aborinus pomo</i> Sonoma tree vole	NA	Feeds nearly exclusively on Douglas-fir needles and requires primarily old growth Douglas-fir forest and mixed conifer forest along the northern California coast. The species is dependent on succulent needles, rain, dew, and fog drip (Lidicker 2013). Ranges from Freestone, Sonoma County, north through Mendocino, Humboldt, and western Trinity counties to the South Fork of the Smith River, Del Norte County (Johnson and George 1991).	Treatment areas lack old growth coastal Douglas-fir forest.	None
<i>Antrozous pallidus</i> pallid bat	SSC WBWG-H	Inhabits rocky terrain in open areas in lowlands, foothills and mountainous areas near water throughout California below 2,000 meters. Roost in caves, rock crevices, mines, hollow trees, buildings and bridges in arid regions in low numbers (<200). Active from March-November; migrates in some areas, but may hibernate locally.	The nearest CNDDDB occurrence (EONDX # 43669) was recorded in 1996 in a winery building along Chalk Hills Road, approximately 5.3 miles south of the treatment areas. Suitable habitat is present in trees and potentially in caves in cliff faces within the treatment areas.	Possible
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	SSC WBWG-H	An obligate cave rooster and moth specialist. Inhabits caves and mines, but may also use bridges, buildings, rock crevices and tree hollows in coastal lowlands, cultivated valleys and nearby hills characterized by mixed vegetation throughout California below 3,300 meters. Exhibits high site fidelity and is highly sensitive to disturbance. Forages along edge habitats near water; may travel long distances during foraging bouts.	The nearest CNDDDB occurrence (EONDX #32126) was recorded in 1987 in a mine approximately 1.75 miles northeast of the treatment areas. Marginally suitable habitat may be present in the structures onsite, though no evidence of roosting was observed during the April 2023 site visit.	Not Expected

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Erethizon dorsatum</i> North American porcupine	SA	Large quill-covered rodent that commonly inhabits coniferous and mixed forested areas, occasionally shrubland and tundra. Makes dens in hollow trees or rocky areas.	Suitable denning habitat is present within the treatment areas. There are two occurrences of the species within the assessment area, the nearest of which is from 2014 and located approximately 11.5 miles northeast of the treatment areas (EONDX #107923).	Possible
<i>Lasiurus cinereus</i> hoary bat	SA WBWG-M	A solitary foliage rooster that prefers evergreens, but will use deciduous trees in forested habitats, particularly in edge habitat (Bolster 2005).	Suitable roosting habitat is present within trees throughout the treatment areas. There are two occurrences of the species within the assessment area, the nearest of which is from 1999 and located approximately 8.3 miles northeast of the treatment areas (EONDX #69768).	Possible
<i>Lasiurus frantzii</i> western red bat	SSC WBWG-H	Primarily associated with intact riparian habitat. Roosts individually in foliage within trees along riparian areas, orchards and suburban areas. Favors cottonwoods, willows, sycamores, and walnut trees (Bolster 2005).	The nearest CNDDB occurrence (EONDX #69769) was recorded in 2000 near Ettawa Springs, approximately 8.0 miles north of the treatment areas. Suitable roosting habitat is present in the foliage of trees throughout the treatment areas.	Possible
<i>Myotis evotis</i> long-eared myotis	SA WBWG-M	Typically inhabits brushy woodland habitats and coniferous forests up to 2,800 meters throughout California except the Central Valley and deserts. Roosts in a variety of habitats including exfoliating bark, tree hollows, caves, rotten stumps, snags, cliff crevices and bridges. A foliage gleaner that requires nearby water.	Suitable roosting habitat is present within trees throughout the treatment areas. There is one occurrences of the species within the assessment area, it is from 2000 and located approximately 8.3 miles northeast of the treatment areas (EONDX #69767).	Possible
<i>Myotis thysanodes</i> fringed myotis	SA WBWG-H	Exhibits a strong roosting preference for large trees and snags, but will use buildings, caves, rock crevices, <i>etc.</i> , if necessary. Inhabits a variety of woodland, scrub and grassland habitats up to 2,850 meters throughout California except for Central Valley and southern deserts. Forages great distances and is active during winter months. Highly sensitive to human disturbance.	Suitable roosting habitat is present within trees throughout the treatment areas. There are two occurrences of the species within the assessment area, the nearest of which is from 1999 and located approximately 8.3 miles northeast of the treatment areas (EONDX #69766).	Possible

SPECIES NAME COMMON NAME	LISTING STATUS ¹	HABITAT REQUIREMENTS & ADDITIONAL NOTES	HABITAT SUITABILITY & LOCAL DISTRIBUTION	POTENTIAL FOR OCCURRENCE
<i>Pekania pennanti</i> fisher	SSC	Small, carnivorous member of the weasel family that inhabits coniferous and mixed-hardwood forests from the boreal forests of Alaska to the Sierra Nevada range of California.	The nearest CNDDB occurrence (EONDX #90288) was recorded on a camera station in 2013 in a mountainous area approximately 1.1 miles east of the treatment areas. This was reported as an unusual occurrence of the species further south than they had previously been recorded, and as such they are likely to be very rare in this region. Suitable habitat is present in woodlands throughout the treatment areas.	Possible
<i>Taxidea taxus</i> American badger	SSC	Inhabits open areas with friable soils within woodland, grassland, savannah and desert habitats. A fossorial mammal that preys predominately on ground squirrels (<i>Ammospermophilus</i> and <i>Spermophilus</i> spp.) and pocket gophers (<i>Thomomys</i> spp.).	The nearest CNDDB occurrence (EONDX #83040) was recorded in 2011 at Pepperwood Preserve, approximately 7.9 miles south of the treatment areas. This occurrence notes that badger presence was not actually confirmed at this location, but that several apparent badger burrows were detected. Suitable habitat is present in grassland portions of the treatment areas, though the species appears to be rare in this region.	Possible

FE: Federally Endangered

FT: Federally Threatened

FC: Federal Candidate for Listing

BCC: Federal Bird of Conservation Concern

ST: State Threatened

SC: State Candidate for Listing

SSC: State Species of Special Concern

FP: State Fully Protected Species

SA: Included on CDFW Special Animals List, but has no other rarity designation

WL: CDFW Watch List Species

WBWG-H: Western Bat Work Group High Priority Species; the species is considered imperiled or at high risk of imperilment

WBWG-M: Western Bat Work Group Medium Priority Species; a lack of meaningful information is a major obstacle in adequately assessing these species' status and should be considered a threat

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RESOLUTION NO. 2627-003

**A RESOLUTION OF THE (GOVERNING BODY) OF SONOMA RESOURCE
CONSERVATION DISTRICT APPROVING THE FORM OF AND AUTHORIZING THE
EXECUTION OF A MEMORANDUM OF UNDERSTANDING AND AUTHORIZING
PARTICIPATION IN THE SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY'S
HEALTH BENEFITS PROGRAM**

WHEREAS, Sonoma Resource Conservation District, a public agency duly organized and existing under and by virtue of the laws of the State of California (the "ENTITY"), has determined that it is in the best interest and to the advantage of the ENTITY to participate in the Health Benefits Program offered by Special District Risk Management Authority (the "Authority"); and

WHEREAS, the Authority was formed in 1986 in accordance with the provisions of California Government Code 6500 *et seq.*, for the purpose of providing risk financing, risk management programs and other coverage protection programs; and

WHEREAS, participation in Authority programs requires the ENTITY to execute and enter into a Memorandum of Understanding which states the purpose and participation requirements for the Health Benefits Program; and

WHEREAS, all acts, conditions and things required by the laws of the State of California to exist, to have happened and to have been performed precedent to and in connection with the consummation of the transactions authorized hereby do exist, have happened and have been performed in regular and due time, form and manner as required by law, and the ENTITY is now duly authorized and empowered, pursuant to each and every requirement of law, to consummate such transactions for the purpose, in the manner and upon the terms herein provided.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY OF THE ENTITY AS FOLLOWS:

Section 1. Findings. The ENTITY's Governing Body hereby specifically finds and determines that the actions authorized hereby relate to the public affairs of the ENTITY.

Section 2. Memorandum of Understanding. The Memorandum of Understanding, to be executed and entered into by and between the ENTITY and the Authority, in the form presented at this meeting and on file with the ENTITY's Secretary, is hereby approved. The ENTITY's Governing Body and/or Authorized Officers ("The Authorized Officers") are hereby authorized and directed, for and in the name and on behalf of the ENTITY, to execute and deliver to the Authority the Memorandum of Understanding.

Section 3. Program Participation. The ENTITY's Governing Body approves participating in the Special District Risk Management Authority's Health Benefits Program.



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Section 4. Severability. If any provision of this resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the resolution which can be given effect without the invalid provision or application, and to this end the provisions of this resolution are severable.

Section 5. Other Actions. The Authorized Officers of the ENTITY are each hereby authorized and directed to execute and deliver any and all documents which are necessary in order to consummate the transactions authorized hereby and all such actions heretofore taken by such officers are hereby ratified, confirmed and approved.

Section 6. Effective Date. This resolution shall take effect immediately upon its passage.

PASSED AND ADOPTED this 22nd day of October, 2026 by the following vote:

AYES: _____

NOES: _____

ABSENT: _____

Bruce Abelli-Amen

Sonoma RCD Board Chair

ENTITY Secretary

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (HEREAFTER “MEMORANDUM”) IS ENTERED INTO BY AND BETWEEN THE SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY (HEREAFTER “SDRMA”) AND THE PARTICIPATING PUBLIC ENTITY (HEREAFTER “ENTITY”) WHO IS SIGNATORY TO THIS MEMORANDUM.

WHEREAS, on August 1, 2006, SDRMA in its capacity as a member of Public Risk Innovation, Solutions and Management (PRISM) and having executed the Joint Powers Agreement (JPA) governing PRISM, was appointed administrator for the purpose of enrolling small public entities into the (PRISM) Health and/or Employee Benefits Small Group Program (hereinafter "Program"); and

WHEREAS, the terms and conditions of the PROGRAM as well as benefit coverage, rates, assessments, and premiums are governed by the PRISM Health Committee and/or PRISM Employee Benefits Committee for the Program (the "Committee") and not SDRMA; and

WHEREAS, ENTITY desires to enroll and participate in the Program, acknowledging that SDRMA acts solely in an administrative capacity and does not establish Program terms.

NOW THEREFORE, SDRMA and ENTITY agree as follows:

1. **DEFINITIONS.** For purposes of this MEMORANDUM, unless the context otherwise requires, the following terms when capitalized have the respective meanings set out below and are applicable to the singular as well as to the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.
 - a. “Committee” means the PRISM Health Committee and/or PRISM Employee Benefits Committee for the Program.
 - b. “Coverage Documents” means, except as otherwise provided herein, coverage documents from each carrier outlining the coverage provided, including terms and conditions of coverage, are controlling with respect to the coverage of the Program and will be provided by SDRMA to each ENTITY. Documents will be made available through the online SDRMA Portal and be accessible to approved users of the ENTITY.
 - c. “Program Participation Agreement” means the agreement issued by PRISM/AUS Underwriting to the Entity that details the final terms of acceptance and any special exceptions or terms that have been made a part of the underwriting approval and is required to be completed and executed in order to constitute full acceptance as a member of the PRISM Small Group Program.

d. "Program" or "PRISM" means the Public Risk Innovation, Solutions and Management (PRISM) Health and/or Employee Benefits Small Group Program.

e. "Program Documents" means the following: SDRMA Program Administrative Guidelines, SDRMA Resolution, Program Underwriting application and any required underwriting documents, Program approval, Program Underwriting & Eligibility Rules and Program Participation Agreement.

2. PURPOSE. ENTITY is signatory to this MEMORANDUM for the sole purpose of enrolling in the Program.
3. ENTRY INTO PROGRAM. ENTITY shall apply for participation in the Program by executing and all forms prescribed by SDRMA. SDRMA shall submit the completed forms to the Program's Underwriter who has the authority to accept or reject Entity's application in its sole discretion based on the Program's governing documents and in accordance with the Program's eligibility guidelines.
4. MAINTENANCE OF EFFORT. Program provides health benefits to all active employees, retired employees, dependents of an active or retired employee and public officials of the ENTITY who satisfy requirements for participation. ENTITY public officials may participate in the Program only if they are currently being covered and their own ENTITY's enabling act, plans and policies allow it. ENTITY must contribute at least the minimum percentage required by the eligibility requirements
5. PREMIUMS. ENTITY agrees and acknowledges that premiums and rates for the Program are set by the Committee and that SDRMA's Administrative Fee is set by SDRMA For each billing cycle. ENTITY will remit the total monthly amount billed by SDRMA for each category of participants and the census of covered employees, public officials, dependents and retirees. PREMIUMs are based on a full month, and there are no partial months or prorated PREMIUMs. Enrollment for mid-year qualifying events and termination of coverage will be made in accordance with the SDRMA Program Administrative Guidelines.

Late Payment Penalties. ENTITY shall pay all PREMIUM invoices as billed to SDRMA, regardless of any changes to eligibility or adjustments to PREMIUMs that may occur during the billing month and not reflected in the PREMIUM invoice. SDRMA shall issue PREMIUM invoices to ENTITY prior to the coverage month in which they are due. PREMIUM invoices are due by the due date stated on the invoice and considered delinquent thirty (30) calendar days from the due date. In addition to the outstanding balance due for any unpaid invoice, ENTITY shall be liable to SDRMA for a late payment penalty of 1% of the outstanding balance of any unpaid portion of such invoice effective (30) calendar days after the invoice due date. SDRMA reserves the right to terminate the

MEMORANDUM and ENTITY'S Participation Agreement, including immediate cessation of all services under the Program, any time after it provides written notice to ENTITY of its failure to pay the amount due of any invoice.

6. **BENEFITS.** Benefits provided to ENTITY participants shall be as set forth in ENTITY's Plan Summary for the Program and as agreed upon between the ENTITY and its recognized employee organizations as applicable. Not all plan offerings will be available to ENTITY, and plans requested by ENTITY must be submitted to Program underwriter for approval.
7. **ASSESSMENTS AND DIVIDENDS.** The Program annual premium, as approved by the Committee will be established at a level which is anticipated to provide adequate overall funding. The Program will directly manage surpluses and deficits. Premiums are targeted to fund expected claims (including incurred-but-not-reported (IBNR) and run-out), reinsurance (if any), Program/administrative expenses, and any reserve or margin adopted by the Committee.

If Program funds are insufficient (including funding IBNR), the Committee may impose premium assessments on all applicable participating Entities, consistent with the JPA, including ENTITY signing this MEMORANDUM. Entities that have withdrawn from the Program are liable for assessments attributable to plan year(s) in which they participated.

After appropriate reserves and obligations are funded and any Committee-approved margin is achieved, the Committee may declare a dividend or premium credit, using a formula recommended by the Program Underwriters and actuary.

8. **WITHDRAWAL.** ENTITY may withdraw from this MEMORANDUM and terminate its Program Participation Agreement for a subsequent calendar year subject to the following condition: ENTITY shall notify SDRMA in writing of its intent to withdraw from this MEMORANDUM and terminate its Program Participation Agreement at least 120 days prior to January 1st of the subsequent calendar year in which it shall be effective. No withdrawal shall become effective until December 31 of the year that notice of termination is received. ENTITY may rescind its notice of intent to withdraw and terminate no later than October 1st. Once ENTITY withdraws from the Program, there is a 3-year waiting period to come back into the Program, and the ENTITY will be subject to underwriting approval.
9. **ARBITRATION OF DISPUTES.** To the extent permitted by law, all controversies between the ENTITY and SDRMA that may arise out of or relate to any of the services provided by SDRMA under the MEMORANDUM, or the construction, performance or breach of this or any other agreement between the ENTITY and SDRMA, whether entered into prior to, on or subsequent to the date hereof, shall be settled by binding arbitration in the City of

Sacramento, California, under the Commercial Arbitration Rules of the American Arbitration Association. Judgment upon any award rendered by the arbitrator(s) shall be final and may be entered into any court having jurisdiction.

10. GOVERNING LAW. This MEMORANDUM shall be governed in accordance with the laws of the State of California.
11. VENUE. Venue for any dispute or enforcement shall be in the City of Sacramento, California.
12. ATTORNEY FEES. The prevailing party in any dispute shall be entitled to an award of reasonable attorney fees.
13. COMPLETE AGREEMENT. This MEMORANDUM together with the related Program Documents constitutes the full and complete agreement of the ENTITY.
14. SEVERABILITY. Should any provision of this MEMORANDUM be judicially determined to be void or unenforceable, such determination shall not affect any remaining provision.
15. AMENDMENT OF MEMORANDUM; WAIVER. This MEMORANDUM may not be modified, nor shall any provision hereof be waived or amended, except in a writing duly signed by authorized representatives of SDRMA and ENTITY. The failure of either Party to enforce at any time any provision of the MEMORANDUM shall not be construed to be a waiver of such provision, nor in any way to affect the validity of the MEMORANDUM or the right of either party thereafter to enforce each and every such provision. If ENTITY fails or refuses to execute an amendment to this MEMORANDUM by the deadline included in written notice of SDRMA'S execution of said amendment, SDRMA reserves the right to terminate this MEMORANDUM and ENTITY'S Program Participation Agreement effective as of the next annual renewal date.
16. EFFECTIVE DATE. This MEMORANDUM shall become effective on the later of the first date of coverage for the ENTITY or the last date of signing of this MEMORANDUM by the Chief Executive Officer or Board President of SDRMA and the authorized person for the ENTITY.
17. EXECUTION IN COUNTERPARTS. This MEMORANDUM may be executed in several counterparts, each of which shall be an original, all of which shall constitute but one and the same instrument.

In Witness Whereof, the undersigned have executed the MEMORANDUM as of the date set forth below.

Dated: _____

By: _____

Special District Risk
Management Authority

Dated: _____

By: _____

Sonoma Resource
Conservation District



MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (HEREAFTER "MEMORANDUM") IS ENTERED INTO BY AND BETWEEN THE SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY (HEREAFTER "SDRMA") AND THE PARTICIPATING PUBLIC ENTITY (HEREAFTER "ENTITY") WHO IS SIGNATORY TO THIS MEMORANDUM.

WHEREAS, on August 1, 2006, SDRMA in its capacity as a member of Public Risk Innovation, Solutions and Management (PRISM) and having executed the Joint Powers Agreement (JPA) governing PRISM, was appointed administrator for the purpose of enrolling small public entities into the Public Risk Innovation, Solutions and Management (PRISM) Health and/or Employee Benefits Small Group Program (hereinafter "PROGRAMprogram"); and

WHEREAS, the terms and conditions of the PROGRAM as well as benefit coverage, rates, assessments, and premiums are governed by the PRISM Health Committee and/or PRISM Employee Benefits Committee for the PROGRAMprogram (the "COMMITTEEcommittee") and not SDRMA; and

WHEREAS, ENTITY desires to enroll and participate in the PROGRAMprogram, acknowledging that SDRMA acts solely in an administrative capacity and does not establish Program terms.

NOW THEREFORE, SDRMA and ENTITY agree as follows:

1. DEFINITIONS. For purposes of this MEMORANDUM, unless the context otherwise requires, the following terms when capitalized have the respective meanings set out below and are applicable to the singular as well as to the plural forms of such terms and to the masculine as well as to the feminine and neuter genders of such terms.
 - a. "Committee" means the PRISM Health Committee and/or PRISM Employee Benefits Committee for the Program.
 - b. "Coverage Documents" means, except as otherwise provided herein, coverage documents from each carrier outlining the coverage provided, including terms and conditions of coverage, are controlling with respect to the coverage of the Program and will be provided by SDRMA to each ENTITY. Documents will be made available through the online SDRMA Portal and be accessible to approved users of the ENTITY.
 - c. "Program Participation Agreement" means the agreement issued by PRISM/AUS Underwriting to the Entity that details the final terms of acceptance and any special exceptions or terms that have been made a part of the underwriting approval and is required to be



completed and executed in order to constitute full acceptance as a member of the PRISM Small Group Program.

d. "Program" or "PRISM" means the Public Risk Innovation, Solutions and Management (PRISM) Health and/or Employee Benefits Small Group Program.

e. "Program Documents" means the following: SDRMA Program Administrative Guidelines, SDRMA Resolution, Program Underwriting application and any required underwriting documents, Program approval, Program Underwriting & Eligibility Rules and Program Participation Agreement.

12. PURPOSE. ENTITY is signatory to this MEMORANDUM for the ~~express-sole~~ purpose of enrolling in the ~~Program~~PROGRAM.

23. ENTRY INTO PROGRAM. ENTITY shall ~~enroll-apply for participation~~ in the ~~Program~~PROGRAM by ~~making application through executing~~ and all forms prescribed by SDRMA. ~~-SDRMA shall submit the completed forms to which shall be subject to approval by the~~ PROGRAM's Underwriter who has the authority to accept or reject Entity's application in its sole discretion based on the Program's ~~and~~ governing documents and in accordance with ~~the Program's applicable~~ eligibility guidelines.

34. MAINTENANCE OF EFFORT. ~~Program PROGRAM is designed to provide an alternative provides~~ health benefits ~~solution~~ to all ~~participants-active employees, retired employees, dependents of an active or retired employee and public officials of the ENTITY who satisfy requirements for participation. of the ENTITY including active employees, retired employees (optional), dependents (optional) and public officials (optional).~~ ENTITY public officials may participate in the ~~Program~~PROGRAM only if they are currently being covered and their own ENTITY's enabling act, plans and policies allow it. ENTITY must contribute at least the minimum percentage required by the eligibility requirements

45. PREMIUMS. ENTITY ~~understands-agrees and acknowledges~~ that premiums and rates for the ~~Program~~ PROGRAM are set by the ~~COMMITTEE~~Committee and that SDRMA's Administrative Fee is set by SDRMA For each billing cycle. ENTITY will remit ~~the total monthly premiums-based upon rates-established amount billed by SDRMA~~for each category of participants and the census of covered employees, public officials, dependents and retirees. ~~PREMIUMs are based on a full month, and there are no partial months or prorated PREMIUMs. Enrollment for mid-year qualifying events and termination of coverage will be made in accordance with the SDRMA Program Administrative Guidelines.~~



~~Rates for the ENTITY and each category of participant will be determined by the COMMITTEE designated for the PROGRAM based upon advice from its consultants and/or a consulting Benefits Actuary and insurance carriers. In addition, SDRMA adds an administrative fee to premiums and rates for costs associated with administering the PROGRAM. Rates may vary depending upon factors including, but not limited to, demographic characteristics, loss experience of all public entities participating in the PROGRAM and differences in benefits provided (plan design), if any.~~

~~SDRMA will administrate a billing to ENTITY each month, with payments due by the date specified by SDRMA. Payments received after the specified date will accrue penalties up to and including termination from the PROGRAM. Premiums are based on a full month, and there are no partial months or prorated premiums. Enrollment for mid-year qualifying events and termination of coverage will be made in accordance with the SDRMA Program Administrative Guidelines.~~

~~Late Payment Penalties. ENTITY shall pay all PREMIUM invoices as billed to SDRMA, regardless of any changes to eligibility or adjustments to PREMIUMS that may occur during the billing month and not reflected in the PREMIUM invoice. SDRMA shall issue PREMIUM invoices to ENTITY prior to the coverage month in which they are due. PREMIUM invoices are due by the due date stated on the invoice and considered delinquent thirty (30) calendar days from the due date. In addition to the outstanding balance due for any unpaid invoice, ENTITY shall be liable to SDRMA for a late payment penalty of 1% of the outstanding balance of any unpaid portion of such invoice effective (30) calendar days after the invoice due date. SDRMA reserves the right to terminate the MEMORANDUM and ENTITY'S Participation Agreement, including immediate cessation of all services under the Program, any time after it provides written notice to ENTITY of its failure to pay the amount due of any invoice.~~

- ~~56.~~ **BENEFITS.** Benefits provided to ENTITY participants shall be as set forth in ENTITY's Plan Summary for the Program ~~ROGRAM~~ and as agreed upon between the ENTITY and its recognized employee organizations as applicable. Not all plan offerings will be available to ENTITY, and plans requested by ENTITY must be submitted to P~~rogram~~~~ROGRAM~~ underwriter for approval.
- ~~6.~~ **COVERAGE DOCUMENTS.** ~~Except as otherwise provided herein, coverage documents from each carrier outlining the coverage provided, including terms and conditions of coverage, are controlling with respect to the coverage of the PROGRAM and will be provided by SDRMA to each ENTITY. SDRMA will provide each ENTITY with additional documentation, defined as the SDRMA Program Administrative Guidelines which provide further details on administration of the PROGRAM.~~
- ~~7.~~ **PROGRAM FUNDING.** ~~It is the intent of this MEMORANDUM to provide for a fully funded PROGRAM by any or all of the following: pooling risk; purchasing individual stop loss~~

~~coverage to protect the pool from large claims; and purchasing aggregate stop loss coverage.~~

~~8. ASSESSMENTS. Should the PROGRAM not be adequately funded for any reason, pro rata assessments to the ENTITY may be utilized to ensure the approved funding level for applicable policy periods. Any assessments which are deemed necessary to ensure approved funding levels shall be made upon the determination and approval of the COMMITTEE in accordance with the following:~~

~~a. Assessments/dividends will be used sparingly. Generally, any over/under funding will be factored into renewal rates.~~

~~b. If a dividend/assessment is declared, allocation will be based upon each ENTITY's proportional share of total premiums paid for the preceding 3 years. An ENTITY must be a current participant to receive a dividend, except upon termination of the PROGRAM and distribution of assets.~~

~~c. ENTITY will be liable for assessments for 12 months following withdrawal from the PROGRAM.~~

~~d. Fund equity will be evaluated on a total PROGRAM wide basis as opposed to each year standing on its own.~~

7. ASSESSMENTS AND DIVIDENDS. The Program annual premium, as approved by the Committee will be established at a level which is anticipated to provide adequate overall funding. The Program will directly manage surpluses and deficits. Premiums are targeted to fund expected claims (including incurred-but-not-reported (IBNR) and run-out), reinsurance (if any), Program/administrative expenses, and any reserve or margin adopted by the Committee.

If Program funds are insufficient (including funding IBNR), the Committee may impose premium assessments on all applicable participating Entities, consistent with the JPA, including ENTITY signing this MEMORANDUM. Entities that have withdrawn from the Program are liable for assessments attributable to plan year(s) in which they participated.

After appropriate reserves and obligations are funded and any Committee-approved margin is achieved, the Committee may declare a dividend or premium credit, using a formula recommended by the Program Underwriters and actuary.

98. WITHDRAWAL. ENTITY may withdraw from this MEMORANDUM and terminate its Program Participation Agreement for a subsequent calendar year subject to the following condition: ENTITY shall notify SDRMA and the PROGRAM in writing of its



intent to withdraw at least 90 days prior to their requested withdrawal date. ENTITY shall notify SDRMA in writing of its intent to withdraw from this MEMORANDUM and terminate its Program Participation Agreement at least 120 days prior to January 1st of the subsequent calendar year in which it shall be effective . No withdrawal shall become effective until December 31 of the year that notice of termination is received. ENTITY may rescind its notice of intent to withdraw and terminate no later than October 1st. ENTITY may rescind its notice of intent to withdraw. ENTITY may rescind its notice of intent to withdraw and terminate no later than October 1st. Once ENTITY withdraws from the ProgramPROGRAM, there is a 3-year waiting period to come back into the ProgramPROGRAM, and the ENTITY will be subject to underwriting approval again.

~~10. LIAISON WITH SDRMA. Each ENTITY shall maintain staff to act as liaison with SDRMA and between the ENTITY and SDRMA's designated PROGRAM representative.~~

9. ARBITRATION OF DISPUTES. To the extent permitted by law, all controversies between the ENTITY and SDRMA that may arise out of or relate to any of the services provided by SDRMA under the MEMORANDUM, or the construction, performance or breach of this or any other agreement between the ENTITY and SDRMA, whether entered into prior to, on or subsequent to the date hereof, shall be settled by binding arbitration in the City of Sacramento, California, under the Commercial Arbitration Rules of the American Arbitration Association. Judgment upon any award rendered by the arbitrator(s) shall be final, and may be entered into any court having jurisdiction.

~~11~~10. GOVERNING LAW. This MEMORANDUM shall be governed in accordance with the laws of the State of California.

~~12~~11. VENUE. Venue for any dispute or enforcement shall be in the City of Sacramento, California.

~~13~~12. ATTORNEY FEES. The prevailing party in any dispute shall be entitled to an award of reasonable attorney fees.

~~14,13.~~ COMPLETE AGREEMENT. This MEMORANDUM together with the related ProgramPROGRAM documents-Documents constitutes the full and complete agreement of the ENTITY.

~~15~~14. SEVERABILITY. Should any provision of this MEMORANDUM be judicially determined to be void or unenforceable, such determination shall not affect any remaining provision.

~~16~~15. AMENDMENT OF MEMORANDUM; WAIVER. This MEMORANDUM may not be modified, nor shall any provision hereof be waived or amended, except in a writing duly signed by authorized representatives of SDRMA and ENTITY. The failure of either Party to enforce at any time any provision of the MEMORANDUM shall not be construed to be a waiver of such provision, nor in any way to affect the validity of the MEMORANDUM or the



~~right of either party thereafter to enforce each and every such provision may be amended by the SDRMA Board of Directors and such amendments are subject to approval of ENTITY's designated representative, or alternate, who shall have authority to execute this MEMORANDUM. Any If ENTITY who fails or refuses to execute an amendment to this MEMORANDUM by the deadline included in written notice of SDRMA'S execution of said amendment, SDRMA reserves the right to terminate shall be deemed to have withdrawn this MEMORANDUM and ENTITY'S Program Participation Agreement from the PROGRAM effective as of on the next annual renewal date.~~

~~17~~16. EFFECTIVE DATE. This MEMORANDUM shall become effective on the later of the first date of coverage for the ENTITY or the last date of signing of this MEMORANDUM by the Chief Executive Officer or Board President of SDRMA and the authorized person for the ENTITY.

~~18~~17. EXECUTION IN COUNTERPARTS. This MEMORANDUM may be executed in several counterparts, each of which shall be an original, all of which shall constitute but one and the same instrument.

In Witness Whereof, the undersigned have executed the MEMORANDUM as of the date set forth below.

Dated: _____

By: _____

Special District Risk
Management Authority

Dated: _____

By: _____

Agency ENTITY Name



Board Executive Committee Meeting Minutes

October 12, 2026 - 9:00 am

1221 Farmers Lane, Suite F

Santa Rosa, CA 95405

<https://us02web.zoom.us/j/88374478889?pwd=ptth2dRbfUupMtrUIQ6Wak0agNtVNH.1>

Meeting ID: 883 7447 8889

Passcode: 553266

1. **Call to Order, Determination of a Quorum, Introductions:** Chair Bruce Abelli-Amen called the meeting to order at 9:02 am. A quorum of the Executive Committee members was determined.
Directors Present: Bruce Abelli-Amen, Steve Worrell.
Directors Absent: Isaac Jenkins
Associate Directors Present: None.
Associate Directors Absent: None.
Staff Present: Anya Nejedlo, Steven Fry.
Others Present: none.
2. **Additions/Changes to the Agenda (Gov. Code 54954.2 (B)):** None.
3. **Public Comment:** None.
4. **Action Items:**
 - A. **Approval of Executive Director to enter into contract with WRA Environmental Consultants for Caltrans Mulas Wetland Mitigation Project for \$166,000.** Watershed Restoration Program Manager, Steven Fry, presented this item. He provided an overview and discussed the scope of the project. Steven shared that four qualified firms submitted proposals. Steven acknowledged that all bids were close in total cost but some varied in scope and approach to addressing concerns regarding potential salinity and hydrology challenges at the project site. Board asked questions and discussed.

Motion to approve: Bruce Abelli-Amen, **2nd:** Steve Worrell. Motion passed, 2 ayes.
Ayes: Abelli-Amen, Worrell.
5. **Future Agenda Items:** None.

Next meeting: December 7, 2026

Adjournment: 9:11 am

To: Sonoma RCD Board of Directors
From: Christine Kuehn, Executive Director
Re: Executive Director Updates, October 2026

North Coast Regional Coordination

On October 15th I attended the North Coast Resource Partnership (NCRP) Strategy Workshop ahead of their quarterly meeting in Ukiah. NCRP is a collaboration among Northern California Tribes, counties, and diverse stakeholders steering strategic coordination and building regional capacity. The NCRP region covers over 19,000 square miles and includes the Tribal lands and the counties of Del Norte, Humboldt, Trinity, Siskiyou, Modoc, Mendocino, and Sonoma, overlapping with the North Coast RCD Collaborative. This interactive day provided updates from our regional representatives as well as opportunities to collaborate with breakout groups addressing several critical topic areas for the North Coast. RCD representatives also included staff from Gold Ridge, Humboldt, Mendocino, and Shasta Valley in Siskiyou County.

Later this month, the North Coast RCD Executive Directors will also be convening beyond our monthly meeting to discuss RCD regional priorities, needs, and capacity.

Anniversaries

Staff

Ari DeMarco – October 4, 2024

Genevieve Tarino – October 4, 2024