FINAL

Project-Specific Analysis/Addendum

Woodpecker Ravine Shaded Fuel Break Phase 1

APRIL 2025

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
CAL FIRE	California Department of Forestry and Fire Protection
CalVTP	California Vegetation Treatment Program
CEG	Certified Engineering Geologist
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CO_2	carbon dioxide
DPM	diesel particulate matter
EIR	environmental impact report
FESA	federal Endangered Species Act
GHG	greenhouse gas
LTS	less than significant
LTSM	less than significant with mitigation
LUST	leaking underground storage tank
MM	mitigation measure
N/A	not applicable
NAHC	Native American Heritage Commission
OES	Office of Emergency Services
PEIR	Program Environmental Impact Report
PG	Professional Geologist
PRC	California Public Resources Code
PS	potentially significant
PSA	Project-Specific Analysis
PSU	potentially significant and unavoidable
RPF	Registered Professional Forester
RWQCB	Regional Water Quality Control Board
SPR	standard project requirement
SR	State Route
SU	significant and unavoidable
TAC	toxic air contaminant
VMT	vehicle miles traveled
WDR	waste discharge requirement
WLPZ	Watercourse and Lake Protection Zone

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1 Introduction

Serving as the lead agency under the California Environmental Quality Act (CEQA), the Nevada County Office of Emergency Services (OES) must comply with CEQA prior to implementing the proposed vegetation treatment activities. Nevada County OES has evaluated the proposed treatments for CEQA compliance as later activities covered by the California Department of Forestry and Fire Protection (CAL FIRE) California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR), using the Project-Specific Analysis (PSA) checklist herein. Consistent with CEQA Guidelines Section 15168(c)(2), if the potential environmental impacts of a proposed vegetation treatment project are determined to be covered by the environmental impacts analyzed in the PEIR, the project may be approved using a finding that the project is within the scope of the PEIR. Such a finding would constitute CEQA compliance under the PEIR. The PEIR identified the range of environmental impacts associated with vegetation treatment projects and required implementation of standard project requirements (SPRs) and mitigation measures (MMs) to address and minimize these impacts. In accordance with the PEIR, all relevant SPRs and MMs would be incorporated into the project. Under CEQA, no additional review is required for a project that is consistent with the PEIR.

The PEIR is available for public review at https://bof.fire.ca.gov/projects-and-programs/calvtp-homepage-and-storymap/.

This document serves as a PSA/Addendum to evaluate whether the proposed Woodpecker Ravine Shaded Fuel Break Phase I project (proposed project) is within the scope of the CalVTP PEIR. Proposed treatment projects qualifying as within the scope of the PEIR must be consistent with the treatment types and treatment activities covered in the CalVTP and the geographic extent of the CalVTP treatable landscape. As further discussed in Chapter 2, Project Description, of this document, the proposed treatment types and treatment activities are consistent with the CalVTP PEIR. Figure 1, Project Location; Figure 2, Project Site; and Figure 3, Proposed Treatments, present the overall project area and the proposed treatment areas and treatment activities. As shown in Figure 4, CalVTP Treatable Landscape, all of the treatable landscape is within the proposed treatment area identified by the CalVTP. Approximately 2,446 acres are within the CalVTP treatable landscape, and approximately 275 acres are in areas that were not modeled as treatable landscape. However, these areas outside the CalVTP treatable landscape are dispersed in sections of various sizes throughout the treatment area (see Figure 4). Although full parcels are mapped in the figures, full parcels would not be treated. Rather, full parcels (totaling approximately 2,721 acres) would be evaluated for flexibility of treatment to achieve 410 acres of treatment in Phase 1.

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

Consistent with CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168, an addendum to an environmental impact report (EIR) would be appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project

have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts (California Public Resources Code [PRC] Section 21166; 14 CCR 15162–15164 and 15168). For the proposed project, the inclusion of areas outside the CalVTP treatable landscape represent a revision or change to the CalVTP. Because the proposed project has aspects that represent a change to the PEIR, an Addendum to the EIR has been prepared and is contained herein.

The project-specific mitigation monitoring and reporting program (MMRP), which identifies the CalVTP SPRs and MMs applicable to the proposed project, is included as Appendix A, Standard Project Requirements and Mitigation Measures Checklist. The SPRs identified in Appendix A have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

Appendix B contains the Project-Specific CEQA Findings and Statement of Overriding Considerations; Appendix C contains the Biological Resources Summary; Appendix D contains the Cultural Resources Report (with confidential appendices removed); Appendix E contains the Soils Report; Appendix F identifies Hazardous Materials Sites in accordance with MM HAZ-3; and Appendix G includes a detailed treatment prescription and a fire policy prepared for Phase 1 of the project.

2 Project Description

Nevada County OES proposes to implement the Woodpecker Ravine Shaded Fuel Break Phase I (proposed project). Phase 1 of the project would include selective thinning to create a shaded fuel break on 410 acres of land located entirely on privately owned parcels. The area proposed for treatment was identified in the CAL FIRE Nevada–Yuba–Placer Unit's Strategic Plan (Unit Strategic Plan). A desktop analysis of the potential treatment area, which includes approximately 2,721 acres, has been completed and detailed in this PSA to allow for flexibility of treatment boundaries and additional treatments to be completed at a later date. The potential treatment area is shown in Figure 2, Project Site. Field-verified treatment areas to be included in Phase 1 (up to 410 acres) are shown in Figure 3. Changes to the field-verified treatment boundaries shown in Figure 3 would require field verification, resource surveys, and documentation.

Areas identified as part of the proposed project are intended to reduce flammable vegetation; provide defensible space to existing residences; and increase accessibility along critical evacuation routes and strategic ridges. This would be achieved by reducing, thinning, or removing ladder fuels and dead/downed fuels, thereby creating defensible space buffers and shaded fuel breaks along evacuation routes. Vegetation treatment activities may include manual and mechanical treatments (chipping, hand crews, and mastication), prescribed fire (pile burning or the use of an air curtain burner), and chemical treatments (herbicides). Herbicide application and pile burning are not planned for Phase 1 but may occur during future maintenance work. Additional treatment prescription details are included in Attachment G.

2.1 Project Location

The project site is in Woodpecker Ravine in Nevada County, California (see Figure 1). The project site is located between State Route (SR) 49 to the west and SR-174 to the north and east. The project site contains rural residential uses surrounded by dense vegetation. The project site consists of shaded fuel breaks on private property alongside existing roadways in the area and strategic ridges (see Figure 2). The northern boundary of the project site follows the shape of Lower Colfax Road. The western boundary of the project site loosely follows Rattlesnake Road. The eastern boundary is relatively contained west of SR-174. The southern boundary of the project site follows Mount Olive Road.

2.2 Project Characteristics

The proposed project consists of a shaded fuel break treatment type and would be implemented using mechanical, manual, prescribed fire, and chemical treatment activities. Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance. Table 1 provides further details on the extent of each treatment activity. It should be noted that some treatment activity areas overlap; therefore, the acres shown in Table 1 are not additive, and the total treatment area in Phase 1 is an approximately 410-acre area. Additional treatment areas may be added as the project progresses and would be analyzed accordingly. These strategic treatments would help to reduce fire intensity during wildfires in areas directly adjacent to evacuation routes and strategic ridgelines. The two major evacuation routes in Woodpecker Ravine are Lower Colfax Road and Rattlesnake Road; both lead to SR-174 or south to other major roads such as Mt. Olive Road and Dog Bar Road.

Table 1. Treatment Activities

Treatment Activity	Acres
Manual	Phase 1 proposes 298 acres
Mechanical	Phase 1 proposes 72 acres
Prescribed fire	Not proposed in Phase 1. Potential to treat up to 410 acres at a later date through pile burning or air curtain burner
Herbicides	Not proposed in Phase 1. Potential to treat up to 410 acres at a later date.

Note: Treatment activities overlap and acres listed are not additive. Total acres to be treated in Phase 1 = 410 acres.

Access

Project employees and transport of equipment would use SR-49, SR-174, Dog Bar Road, Mt. Olive Road, Lower Colfax Road, and Rattlesnake Road to access the proposed project site. No new roads are proposed. Some access roads are unpaved. The proposed project would include right-of-entry agreements from private landowners to implement treatments on private land and to use private roads to access treatment sites.

Biomass Disposal

Left-over woody debris would be disposed of through mastication, chipping and spreading on site up to 4 inches in depth, or pile burning. The use of an air curtain burner is also a possibility. Burn piles may be left in place and burned at a later date under favorable conditions.

Equipment and Crews

Table 2 provides details regarding the proposed equipment and crew sizes for each treatment type. Crews would consist of private contractors. Nevada County staff and local fire agency staff would also be on site as needed.

Table 2. Equipment and Crews

Treatment Type	Crew Size	Equipment
Manual	12–24 for manual work	Equipment would include hand-operated tools, such as chainsaws, a brush cutter/weed whacker, and a tow-behind chipper, as well as trucks and personal vehicles for transport of crews and equipment. Chippers would be used to assist with manual treatments and would be staged on existing access roads, outside of steep-slope areas.
Mechanical	5–12 personnel	Hand crews would be used in combination with heavy equipment, including track chippers, masticators, a skid steer, a small excavator, and a small excavator with tree shears.
Prescribed Fire* (Pile burning)	Varies	Water tank or other water source, fire extinguishers, metal hand tools (e.g., shovel, McLeod, rake)
Herbicides*	8–16 for herbicide application	A truck with a chemical storage tank and backpack spray applicators would be used. Specific chemicals to be used will be determined by PCA recommendation.

Notes: PCA = Pest Control Advisor.
* Not proposed for Phase 1, may occur at a later date during treatment maintenance.

Implementation Timeline and Treatment Maintenance

Implementation of Phase 1 is anticipated to begin in spring 2025. Nevada County OES intends to treat approximately 410 acres in Phase 1. Treatment maintenance would be implemented every 3 years, per the CAL FIRE Unit Strategic Plan, or more frequently as needed (CAL FIRE 2023). Full parcels have been evaluated in this PSA to allow for flexibility of treatment boundaries and additional treatments to be completed at a later date. The potential treatment area, as shown in Figure 2, Project Site, includes approximately 2,721 acres.

2.3 Treatment Design

Treatment types proposed are consistent with the PEIR and include shaded fuel breaks**.** Shaded fuel breaks would be created around primary and secondary evacuation routes and other roads. No non-shaded (vegetation free) fuel breaks are proposed. The treatment prescription is being developed by the Registered Professional Forester (RPF) consultant, Mason, Bruce & Girard, with input from Nevada County OES, private property owners, CAL FIRE, and the environmental consultant (Dudek). Fuel breaks would increase the horizontal spacing between retained vegetation, increase the vertical separation between surface fuels and overstory tree canopies, and modify surface fuels (grasses, shrubs, debris) to reduce fire intensity and flame lengths. Recommended fuel breaks would vary in total width depending on terrain, vegetation, and proximity to developed uses. It is anticipated that maintenance of shaded fuel breaks would be necessary every 3 years, although conditions may warrant more frequent maintenance.

The proposed treatment activities would be consistent with the PEIR and would include manual treatments, mechanical treatments, prescribed fire, and herbicide treatments. SPRs outlined in the PEIR would be implemented as part of the proposed project, where applicable.

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3 The California Vegetation Treatment Program Environmental Checklist

Project Information

1.	**Project Title:**	Woodpecker Ravine Shaded Fuel Break Phase I Board of Forestry Project ID: 2024-12
2.	**Project Proponent Name and Address:**	Nevada County Office of Emergency Services 950 Maidu Avenue, Suite 130 Nevada City, California 95959
3.	**Contact Person Information and Phone Number:**	Alex Keeble-Toll, 530.470.2521
4.	**Project Location:**	Nevada County, Woodpecker Ravine, privately owned parcels
5.	**Total Area to be Treated (acres):**	Phase 1 410 acres; Potential Treatment Area for future work: 2,721 acres
6.	**Description of Project:** (Describe the whole action involved, including any phasing of initial treatments as well as planned treatments, including equipment to be used and planned duration of treatments, but not limited to later phases (e.g., maintenance) of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.) See Section 2, Project Description.	

7.	**Treatment Types** *[see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in Description of Project]*			
	☐	Wildland-Urban Interface Fuel Reduction		
	☒	Fuel Break		
	☐	Ecological Restoration		
8.	**Treatment Activities** [*see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in Description of Project*]			
	☐	Prescribed (Broadcast) Burning,		
	☒	Prescribed (Pile) Burning,		410 acres
	☒	Mechanical Treatment,		72 acres
	☒	Manual Treatment,		298 acres
	☐	Prescribed Herbivory,		
	☒	Herbicide Application,		410 acres
9.	**Fuel Type** [*see description in in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in Description of Project*]			
	☒	Grass Fuel Type		
	☒	Shrub Fuel Type		
	☒	Tree Fuel Type		

10.	**Geographic Scope** [Refer to [to be determined] for a map of the CalVTP treatable landscape, check one box]	
	☐	The treatment site is entirely within the CalVTP treatable landscape
	☒	The treatment site is NOT entirely within the CalVTP treatable landscape
11.	**Surrounding Land Uses and Setting:** (Briefly describe the project's surroundings)	
	The project site is within Woodpecker Ravine in Nevada County, on approximately 2,721 acres of land located entirely on privately owned parcels containing residential uses. Public and private access roads are also present in the project area. The City of Grass Valley is approximately 1.70 miles northwest of the project. Empire Mine State Historic Park is approximately 1 mile northwest of the project.	
12.	**Other Public Agencies Whose Approval is Required**: (e.g., permits)	
	No other public agency approvals are required for this project. The California Department of Fish and Wildlife and California Department of Conservation were consulted for input on the treatment design after a field visit. Northern Sierra Air Quality Management District (NSAQMD) will be consulted, and a smoke management plan will be prepared prior to burning operations.	
	Coastal Act Compliance	
	☒	The proposed project is NOT within the Coastal Zone
	☐	The proposed project is within the Coastal Zone (*check one of the following boxes*)
	☐	A coastal development permit been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable
	☐	The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required

13.	**Native American Consultation**. Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an environmental impact report, negative declaration, or mitigated negative declaration. For treatment projects that require additional CEQA review and documentation, have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to PRC Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? ***Note:*** *For treatment projects that are within the scope of this PEIR, Assembly Bill (AB) 52 consultation has been completed. The California Board of Forestry and Fire Protection and CAL FIRE completed consultation pursuant to PRC Section 21080.3.1 in preparation of the PEIR.* Pursuant to SPR CUL-2 (Contact Geographically Affiliated Native American Tribes), Nevada County OES contacted culturally affiliated tribes via certified mail and email on March 21, 2025. To date, two responses have been received, and consultation is in progress. The proposed project is within the scope of the PEIR and does not require additional CEQA review and documentation.
14.	**Use of PSA for Treatment Maintenance:**
	[*Prior to implementing a maintenance treatment, the project proponent would verify that the expected site conditions as described in the PSA are present in the treatment area. As time passes, the continued relevance of the PSA would be considered by the project proponent in light of potentially changed conditions or circumstances. Where the project proponent determines that the PSA is no longer sufficiently relevant, the project proponent would determine whether a new PSA or other environmental analysis is warranted. In addition to verifying that the PSA continues to provide relevant*

	CEQA coverage for treatment maintenance, the project proponent would update the PSA at the time a maintenance treatment is needed when more than 10 years have passed since the approval of the PSA or the latest PSA update. For example, the project proponent may conduct a reconnaissance survey to verify that conditions are substantially similar to those anticipated in the PSA. Updated information should be documented.] The proposed project would be implemented over a 10-year timeframe. Prior to implementing treatments or retreating any area within the project site boundary, Nevada County OES will verify that site conditions described in the PSA are still relevant.	
15.	**Standard Project Requirements and Mitigation Measures.** *[Refer to Appendix A to identify which SPRs and Mitigation Measures apply to the project. Complete Appendix A to document the responsible party for each applicable SPR and Mitigation Measure. Check one box below.]*	
	☒	All applicable SPRs and Mitigation Measures are feasible and will be implemented
	☐	There is NO new information which would render mitigation measures previously considered infeasible or not considered in the CalVTP PEIR now feasible OR such mitigation measures have been adopted. [CEQA Guidelines Section 15162(a)(3); PRC Section 21166(c)]
	☐	All applicable SPRs and Mitigation Measures are NOT feasible or will NOT be implemented (*provide explanation*)
Explanation:		

DETERMINATION (To be completed by the project proponent)

On the basis of this initial evaluation:

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

☒ I find that 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, an ADDENDUM is adopted to address the project areas outside geographic extent presented in the PEIR.

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

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

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

Signature: _____Date_____

Printed Name: _____Title_____

_____
Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the life span of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MMs required by the CalVTP PEIR.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:
    - Less Than Significant (LTS) – An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
    - Less Than Significant *with* Mitigation (LTSM) – An impact was identified within the PEIR that was viewed in totality as potentially significant and/or significant and unavoidable, and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.
    - Potentially Significant (PS) – An impact treated as if it were a significant impact. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
    - Potentially Significant and Unavoidable (PSU) – An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR
    - Significant and Unavoidable (SU) – An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
    - Not Applicable (N/A) – If the impact is evaluated to be the same or equal to the impact in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.
4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.

5. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.
6. Standard Project Requirements (SPRs) and Mitigation Measures (MMs).
   - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
   - **Implementing Entity**. In most cases this will be CAL FIRE. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archaeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
   - **Verifying/Monitoring Entity**. In most cases this will be CAL FIRE. The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.
   - **NOTE**: The cited SPRs and MMs are summarized to manage the template size. Refer to Appendix A for the approved CalVTP requirements.

3.1 Aesthetics and Visual Resources

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	Impact AES-1, pp. 3.2-16–3.2-19	SPR AES-2 SPR AES-3 SPR AQ-2 SPR AQ-3	LTS	Yes	SPR AES-2 SPR AES-3 SPR AQ-2 SPR AQ-3	LTS	☒

Impact Discussion: The proposed project would involve creating a shaded fuel break using a combination of mechanical, manual, prescribed burning (pile burning or the use of an air curtain burner), and chemical (herbicides) treatments. Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance. The potential for the treatment activities to result in short-term degradation of a scenic vista or visual character or the quality of public views, or damage to scenic resources in a state scenic highway was examined in the CalVTP PEIR. Equipment and vehicles associated with treatment activities could be visible to public viewers at scenic vistas, along a state scenic highway, or at other public viewing locations. The project site is not within view of highly valued public viewing locations, such as recreational areas, scenic vistas, trails, or scenic highways. The potential treatment area is located entirely on privately owned parcels and may be visible to the owners of those parcels and occupants in and near the parcels rather than to the public. Treatment areas would also be visible to those traveling along the roads that border the project site, which include the following: Lower Colfax Road to the north; Rattlesnake Road, Highland Drive, Dog Bar Road, and Oak Ridge Drive to the west; Lower Colfax Road, Sierra Vista Drive, and Sunshine Valley Road to the east; and Honey Hollow Road and Mt. Olive Road to the south.

Lower Colfax Road, which serves as the northern and northeastern boundary for the project site, is just off SR-74, which is an eligible California state scenic highway located approximately 0.5 miles north of the northern boundary of the proposed project treatment area (Caltrans 2018). Vegetation treatment is planned along Lower Colfax Road, which runs parallel to SR-174. However, due to intervening terrain and fast travel speeds, views of the project site are limited and intermittent. The Nevada County General Plan contains policies in Chapter 18, Aesthetics, that are designed to (1) promote and provide for aesthetic design in new development that reflects existing character and (2) protect and preserve important scenic resources (County of Nevada 1995a). Scenic resources would include those associated with river valleys, mountains, scenic highways, establishment of permanent open spaces, public forests, and conservation areas. The following policies from the Aesthetics Element would be most relevant to the proposed project (County of Nevada 1995a):

Policy 18.2

- The County may adopt Specific Design Guidelines for areas within Community Regions, Rural Places, and Rural Centers to provide for the maintenance of community identity, scenic resources and historic sites and areas. The Specific Design Guidelines may include, but not be limited to standards which:
  - Encourage landscape treatment to enhance the built environment, including the preservation, long-term maintenance, and use of drought-tolerant native species.
- Specific Design Guidelines shall be implemented through the regulations of the "D" Design Combining District of the County zoning ordinance.

Policy 18.7

- Encourage protection of scenic corridors wherever feasible.

While treatment areas may be visible to the public, views of treatment areas would be limited to vehicles passing through the areas, which would be brief, and to views from private property. Because treatment areas are located on privately owned parcels, visibility of the treatment areas from close proximity are primarily available to the owners of these parcels or the occupants within and close to the treatment areas. The proposed treatment activities would not block views, dominate a viewshed, degrade visual character or quality of public views, or significantly disrupt views from a scenic vista or state scenic highway. Although equipment and vehicles may be visible from the roads near the treatment sites, treatment activities within each treatment area would be temporary. With implementation of SPR AES-2 and SPR AES-3 (see Appendix A for all SPRs and MMs), Nevada County OES would avoid staging equipment within viewsheds and would retain sufficient vegetative screening to block views of the treatment areas. Proposed treatments would not involve complete removal of vegetation. Rather, fuel break treatments would increase the horizontal spacing between retained vegetation, increase the vertical separation between surface fuels and overstory tree canopies, and modify surface fuels (grasses, shrubs, debris) to reduce fire intensity and flame lengths. Treatments would consist of selective thinning, removal of dead and dying trees, and control of invasive species (where present) to promote the reestablishment of native species.

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

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	Impact AES-2, pp. 3.2-20–3.2-25	SPR AES-1 SPR AES-3 SPR AD-4	LTS	Yes	SPR AES-1 SPR AES-3 SPR AD-4	LTS	☒

Impact Discussion: Phase 1 of the proposed project would create a shaded fuel break on approximately 410 acres of private property. The potential for the treatment activities to result in long-term visual impacts was examined in the CalVTP PEIR. As discussed previously, the project site is in Woodpecker Ravine and public views of the proposed project are possible, because project activities would occur near roads where vehicle travel is anticipated. Additionally, as described previously, there is an eligible California state scenic highway, SR-174, approximately 0.5 miles north of the northern boundary of the proposed project treatment area.

Vegetation treatment is planned along Lower Colfax Road, which runs parallel to SR-174. However, due to intervening terrain and fast travel speeds, views of the project site from SR-174 are limited and intermittent. Further, project vegetation treatment would consist of shaded fuel breaks, where existing vegetation would be thinned, and complete removal of vegetation is not proposed. Details of the treatment prescription are included in Attachment G. Treatment activities would reduce vegetation throughout the project site. Although views of the proposed project would be available to the public, due to distance, speed of travel, and the amount of vegetation that would be retained within and surrounding the project site, the proposed project would not result in significant long-term degradation of scenic vistas, visual character, public views, or any scenic resources visible from a state scenic highway. Additionally, SPR AES-1 and SPR AES-3 would be incorporated into vegetation treatments to break up or screen linear edges of treatment areas and screen views from public viewpoints as feasible. SPR AD-4 would be incorporated prior to prescribed pile burning to ensure notification of the public prior to the commencement of burning operations. Further, as discussed in Impact AES-1, visual impacts associated with smoke dispersion would be temporary.

With implementation of SPR AES-1, SPR AES-3, and SPR AD-4, the proposed project would not result in a long-term or substantial degradation of a scenic vista, substantially damage resources in a state scenic highway, or degrade the existing visual character and quality of the project site. Therefore, the proposed project would result in a less-than-significant impact to visual resources, which is consistent with the PEIR and would not constitute a substantially more significant impact than was analyzed in the PEIR.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	Impact AES-3, pp 3.2-25–3.2-27	MM AES-3	SU	No	N/A	N/A	☒

Impact Discussion: The proposed project would not implement the Non-Shaded Fuel Break Treatment Type; therefore, this impact does not apply and it is not analyzed in this document. No impacts beyond what were analyzed in the PEIR would occur.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Aesthetics: Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: Site-specific characteristics of the proposed project are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.2. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of land outside the CalVTP treatable landscape on the project site constitutes a change to the geographic extent presented in the PEIR. However, within the project site, the existing environmental conditions pertinent to aesthetics and visual resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in any new significant impact. Therefore, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to aesthetics and visual resources would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AES-1: Vegetation Thinning and Edge Feathering. This SPR only applies to mechanical and manual treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR AES-2: Avoid Staging within Viewsheds. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AES-3: Provide Vegetation Screening. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks.	No	N/A	N/A
SPR AQ-2: Submit Smoke Management Plan. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR AD-4: Public Notifications for Prescribed Burning. At least three days prior to the commencement of prescribed burning operations, the project proponent will: (1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; (2) publish a public interest notification in a local newspaper or other widely distributed media source describing the activity, timing, and contact information; (3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES

3.2 Agriculture and Forestry Resources

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact
Impact AG-1: Result Directly in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	Impact AG-1, pp 3.3-7–3.3-8	N/A	LTS	Yes	N/A	LTS	☒

Impact Discussion: The proposed project would create a shaded fuel break using a combination of mechanical, manual, prescribed burning (pile burning and the use of an air curtain burner), and chemical (herbicide) treatments. Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance. According to the Nevada County General Plan, the land use designation for the project area is a mix of Estate (EST), Rural 5 acres (RUR-5), and Rural 10 acres (RUR-10) per the Nevada County General Plan Land Use Map for the project site (County of Nevada 1995b). The project site is not currently designated or zoned as forest land. However, the project site does include forest and woodland type vegetation. However, the project does propose removal of trees larger than 10 inches in diameter at standard height, and shaded fuel breaks would remove dead and dying material, ladder fuels, and surface dead woody material to thin the existing vegetation within the treatment areas. Proposed vegetation treatments would vary across the project site. Details regarding the treatment prescription can be found in Attachment G. Any tree

removals would comply with the Nevada County Code of Ordinances, Title 2, Chapter IV, Article 4.A, Section G-IV 4.A.34: Removing Trees, and Nevada County General Plan, Chapter 13: Wildlife and Vegetation, Policy 13.2 (County of Nevada 2024a, 1995c). Additionally, the existing uses within the project site would remain the same after project implementation. Therefore, the proposed project would not result in the direct loss of forest land or conversion of forest land to non-forest use. As a result, the proposed project would have a less-than-significant impact on agriculture and forestry resources. Impacts related to agriculture and forestry resources would not be substantially more significant than those analyzed in the PEIR.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Agriculture and Forestry Resources: Would the project result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: Site-specific characteristics of the proposed plan are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.3. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of land outside the CalVTP treatable landscape in the project site constitutes a change to the geographic extent presented in the PEIR. However, within the project site, the existing environmental and regulatory conditions related to agriculture and forestry present in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new significant impacts not addressed in the PEIR. Therefore, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to agriculture and forestry resources would occur.

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

Impact Discussion: The proposed project would require the use of vehicles, mechanical equipment, and hand tools. These actions would result in the emission of criteria pollutants that could exceed the California Ambient Air Quality Standards (CAAQS), the National Ambient Air Quality Standards (NAAQS), and Northern Sierra Air Quality Management District Rules and/or Nevada County air quality rules and regulations. Mechanical treatment would require the use of heavy-duty off-road equipment, such as a masticator, and manual treatments would require the use of chainsaws and other handheld equipment. A chipper may also be used to assist with biomass disposition. The proposed project would also include pile burning and the use of air curtain burner, which would generate criteria pollutants. The potential for the emission of criteria pollutants from the described activities was examined in the PEIR. SPR AQ-1 through SPR AQ-4 and SPR AQ-6 would be implemented by the project proponent (Nevada County OES) to reduce the level of criteria pollutants generated by treatment activities. SPR AQ-5 would not apply to the proposed project because the project site does not contain any naturally occurring asbestos (USGS n.d.a). The components of MM AQ-1 that have been determined by Nevada County OES to be feasible would be implemented to reduce emissions related to offroad vehicles and equipment, including use of Tier 4 diesel-powered equipment, use of electric- or gasoline-powered equipment, encouraging carpooling to the project site, and using the Best Available Control Technology on equipment for reduction of oxides of nitrogen (NO_x) and particulate matter emissions. To the extent feasible, equipment meeting Tier 4 emission standards and renewable energy goals would be used. Although implementation of the applicable SPRs and MM AQ-1 would lower the level of impact related to criteria air pollutants, as described in the PEIR, this impact would remain significant and unavoidable. It is not anticipated that the proposed project would result in more significant impacts than those analyzed in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	Yes	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	☒

Impact Discussion: The project would require the use of vehicles and mechanical equipment during treatments, as described previously, which could expose people to diesel particulate matter (DPM) emissions. However, the treatments would take place over a short duration of time and would not occur all at once, limiting the level of exposure to DPM in any single location. Further, the treatment activities would progress across the treatment sites, meaning that DPM generated by treatment activities would not take place near any single sensitive receptor for an extended period. SPR HAZ-1 would be implemented, requiring that all diesel- and gasoline-powered equipment be properly maintained in compliance with state and federal requirements, to prevent excessive emissions of DPM. Further, SPR NOI-4 and SPR NOI-5 would be implemented by the project proponent, requiring staging areas to be as far as possible from human receptors and restricting the amount of time equipment can idle. Therefore, with implementation of SPR HAZ-1, SPR NOI-4, and SPR NOI-5, the impact related to DPM would be less than significant.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	SPR AQ-4 SPR AQ-5	LTS	No	N/A	No Impact	☒

Impact Discussion: The proposed treatment activities would involve ground-disturbing activities, including the use of heavy machinery and equipment. The proposed project would require the use of off-road equipment for mechanical treatment activities. Ground-disturbing activities could expose receptors to fugitive dust emissions contain naturally occurring asbestos. However, the proposed treatment areas are not located on soil types that contain naturally occurring asbestos (USGS n.d.a). Therefore, the proposed project would result in no impact related to emissions containing naturally occurring asbestos and related health risk.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	Impact AQ-4, 3.4	SPR AD-4 SPR AQ-2 SPR AQ-6	PSU	Yes	SPR AD-4 SPR AQ-2 SPR AQ-3 SPR AQ-6 MM GHG-2	SU	☒

Impact Discussion: The proposed project may include a combination of prescribed burning treatments, including prescribed pile burning or the use of an air curtain burner. Pile burning or the use of an air curtain burner could take place across any of the 410 acres of Phase 1 as a means of biomass disposal, based on site-specific conditions. Prescribed burning (pile burning) is not included as part of Phase 1, but may occur at a later date during treatment maintenance. The use of an air curtain burner was not specifically analyzed in the PEIR but is suggested in the PEIR in MM GHG-2 as a method to reduce emissions (further discussed below).

Prescribed burning could expose people to toxic air contaminants (TACs). Exposure to TACs from prescribed burns would be short term, lasting from 1 day to 1 week. Firefighters and the general public may be exposed to smoke during prescribed burning, which, depending on wind conditions, could potentially impact the surrounding communities in the immediate project vicinity, as well as the City of Grass Valley, 1.7 miles northeast of the project site, and the unincorporated communities located within 0.3 to 2 miles of the project site, including Union Hill, Cedar Ridge, Kres, Peardale, Coleman, Pinecrest, Chicago Park, Shady Glen, and Alta Sierra. However, because the smoke would be dispersed over a distance, the public would experience lower levels of TACs, and the locations of adjacent communities would be taken into consideration when planning the prescribed burning. Prescribed burning would take place on a date when conditions are most favorable.. Prior to prescribed burning, a Burn Plan would be created per SPR AQ-3 and public notification of the prescribed burning would be conducted per SPR AD-4. The prescribed burning would be required to adhere to the Burn Plan; should conditions deviate from the Burn Plan, the burn would be rescheduled. Crews would remain on site to monitor prescribed burning activities. Further, the project proponent would implement SPR AQ-2 and SPR AQ-6, requiring the creation of a smoke management plan, and would follow all CAL FIRE safety procedures to limit the exposure to TACs.

Biomass may be burned inside an aboveground air curtain burner (e.g., BurnBoss T24), if this is deemed useful and a suitable location for safely deploying the unit is identified (i.e., a flat area with sufficient distance from vegetation to avoid accidental ignition). The use of an air curtain burner would assist in reducing air pollution. Specialized biomass processing technologies, such as air curtain burning, may be used for biomass disposal as an alternative to pile burning in some areas. Biomass processing technologies have been designed to consume biomass quickly and efficiently, with a substantial reduction in smoke compared to pile burning. MM GHG-2 in the CalVTP PEIR requires project proponents to implement feasible methods for reducing greenhouse gas (GHG) emissions, including the use of air curtain burners. The intent of using these technologies is to sequester carbon for soil amendments, reduce the production of smoke particles, and reduce GHG emissions released into the atmosphere to the extent feasible.

The use of an air curtain burner would substantially reduce reactive organic gas (ROG) and particulate matter (PM) emissions, for a reduction of approximately 96% compared to pile burning. Air curtains are estimated to reduce NO_x) emissions by at least 73% (Ascent 2022). Based on available information about emissions from specialized biomass processing technologies, these technologies offer the opportunity to substantially reduce local exposure to PM from smoke, a potentially beneficial difference compared to pile burning. An essential function of these specialized biomass processing technologies is to reduce smoke and resultant GHG emissions compared to pile burning by consuming biomass quickly and efficiently. According to a 2020 study of biomass, air curtain burners emit 54% less carbon dioxide (CO_2) emissions compared to pile burning (Puettmann et al. 2020, as cited in Ascent 2022).

Although SPR AD-4, SPR AQ-2, SPR AQ-3, SPR AQ-6, and MM GHG-2 would be implemented to prevent and minimize smoke emissions and exposure to TACs from smoke, this impact would remain significant and unavoidable as determined in the PEIR.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	Impact AQ-5, 3.4	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	Yes	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	☒

Impact Discussion: The treatments under the proposed project would require the use of vehicles and mechanical equipment, as described above, that could expose people to objectionable odors from diesel exhaust. However, diesel exhaust emissions would not be at excessive levels, nor would they affect a substantial number of people. The exposure to objectionable odors would be short term and dispersed across the project site. As described in Impact AQ-2, the emissions would be temporary and would not be generated in one location for an extended period; further, the emissions would dissipate rapidly from the source as distance increased. All diesel- and gasoline-

powered equipment would be properly maintained in compliance with state and federal emission requirements, which would lower the level of emissions from diesel exhaust, per SPR HAZ-1. The project proponent would also implement SPR NOI-4 and SPR NOI-5. These SPRs would reduce the level of exposure to diesel exhaust by requiring staging areas to be as far from receptors as possible and restricting idling time. Therefore, this impact would be less than significant.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	Impact AQ-6, 3.4	SPR AD-4 SPR AQ-2 SPR AQ-3 SPR AQ-6	PSU	Yes	SPR AD-4 SPR AQ-2 SPR AQ-3 SPR AQ-6	SU	☒

Impact Discussion: The proposed project may include pile burning to dispose of vegetation removed by manual or mechanical treatment methods. Prescribed burning (pile burning) is not included as part of Phase 1, but may occur at a later date during treatment maintenance. The use of an air curtain burner to dispose of vegetation cleared by mechanical or manual vegetation treatments is also a possibility. Prescribed burning could expose people to objectionable odors from the smoke. This would be temporary and would depend on the intensity of the produced smoke, wind speed, wind direction, and the proximity and sensitivity of exposed individuals. Prescribed burning would require the participation of personnel from the local fire agency if implemented under the grant. The proposed project would occur on privately owned lots. Odors from the prescribed burning would potentially impact the surrounding communities, as discussed in Impact AQ-4, depending on wind conditions. This exposure would occur infrequently, because prescribed burns would occur when conditions are favorable and for a short duration, lasting between 1 day and 1 week. As described in Impact AQ-4, the project proponent would implement actions to reduce the exposure of receptors to smoke and associated odors. SPR AD-4, SPR AQ-2, SPR AQ-3, and SPR AQ-6 would be implemented to prevent and minimize smoke odors. Additionally, as discussed in Impact AQ-4, the use of an air curtain burner would substantially reduce the amount of smoke during prescribed burning. However, there is no guarantee that smoke from every prescribed burn would behave as predicted, and this impact would remain significant and unavoidable as determined in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Air Quality: Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: Site-specific characteristics of the proposed project are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR, Section 3.4. Although the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions on the project site relating to air quality are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of land in the project site that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the project site, the existing environmental and regulatory conditions pertinent to air quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in any new significant impact. Therefore, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to air quality would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AQ-1: Comply with Air Quality Regulations. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AQ-2: Submit Smoke Management Plan. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR AQ-4: Minimize Dust. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR AQ-5: Avoid Naturally Occurring Asbestos. The project proponent will avoid ground-disturbing activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by applicable air district will be followed. This SPR applies to all treatment activities and treatment types.	No	N/A	N/A
SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns will follow all safety procedures required of CAL FIRE crews, including the implementation of an approved Incident Action Plan (IAP). This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques. Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.	Yes	Nevada County OES During	Nevada County OES
MM GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR HAZ-1: Maintain All Equipment. The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal	Yes	Nevada County OES, local fire agency staff, contractor crews Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
emissions requirements. Maintenance records will be available for verification. This SPR applies to all treatment activities and treatment types.			
SPR NOI-4: Locate Staging Areas Away from Noise-Sensitive Land Uses. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR NOI-5: Restrict Equipment Idle Time. The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR AD-4: Public Notifications for Prescribed Burning. At least three days prior to the commencement of prescribed burning operations, the project proponent will: (1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; (2) publish a public interest notification in a local newspaper or other widely distributed media source describing the activity, timing, and contact information; (3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES

3.3 Archaeological, Historical, and Tribal Cultural Resources

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

Impact Discussion: Consistent with SPR CUL-1, a records search was performed by the North Central Information Center on April 16, 2024 (see Appendix D for more details). The search revealed thirteen previously recorded built environment cultural resources within the project site. These include eight roads dating to the historic-era and maintained for modern use, two single family homes, two water conveyance features, a transmission line– all dating to the 20th century. These resources have not been evaluated as eligible for listing in the California Register of Historical Resources. Although it is not known whether the unevaluated features are considered resources under CEQA, all structures (i.e., buildings, bridges, roadways) over 50 years old that are eligible or have not been evaluated for historical significance and are present in the treatment area will be avoided pursuant to SPR CUL-7. The potential for these treatment activities to result in disturbance, damage, or destruction of built-environment structures that have not yet been evaluated for historical significance was examined in the PEIR. This impact is within the scope of the PEIR because treatment activities and the intensity of ground disturbance related to treatment activities are consistent with those analyzed in the PEIR. The inclusion of land in the proposed treatment area that is outside of the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the treatment area, the potential to encounter built environment structures that have not yet been evaluated for historical significance in areas outside the treatable landscape is essentially the same as those within the treatable landscape; therefore, the potential impact to historical resources is also the same, as described above. SPRs applicable to this impact are CUL-1, CUL-7, and CUL-8. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	Impact CUL-2, pp. 3.5-15– 3.15-16	SPR AD-2 SPR CUL-1 through SPR CUL-5 SPR CUL-8 MM CUL-2	SU	Yes	SPR AD-2 SPR CUL-1 through SPR CUL-5 SPR CUL 8 MM CUL-2	PSU	☒

Impact Discussion: Consistent with SPR CUL-1, a records search was performed by the North Central Information Center on April 16, 2024. The search identified three previously recorded archaeological or subsurface historical resources within the project site. This includes two pre-contact indigenous archaeological resources and one 20th century mining feature. Vegetation treatment activities could churn up the surface of the ground as vegetation is removed and during prescribed burning; this may result in damage to known or previously unknown archaeological resources.. A survey would be conducted before treatment pursuant to SPR CUL-4 to confirm the boundary of the previously recorded archaeological sites, and to identify any previously unrecorded archeological resources, and identified resources would be avoided according to the provisions of SPR CUL-5.

The potential for proposed treatment activities to result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources during vegetation treatment was examined in the PEIR. This impact was identified as significant and unavoidable in the PEIR because of the large geographic extent of the treatable landscape and the possibility that there could be some rare instances where inadvertent damage of unknown resources may be extensive. SPRs and MM CUL-2 would require identification and protection of resources, and it is reasonably expected that implementation of these measures would avoid a substantial adverse change in the significance of any unique archaeological resources or subsurface historical resources. Because the project could result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources, it would contribute to the environmental significance conclusion in the PEIR; therefore, for purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable. This impact is within the scope of the PEIR because the treatment activities and intensity of ground disturbance of the treatment project are consistent with those analyzed in the PEIR. SPRs applicable to this treatment include CUL 1 through CUL-5 and CUL-8. MM CUL-2 would also apply to this treatment to protect any inadvertent discovery. 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 Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, p. 3.5-17	SPR CUL-1 through SPR CUL-6 SPR CUL-8	LTS	Yes	SPR CUL-1 through SPR CUL-6 SPR CUL-8 MM CUL-2	LTSM	☒

Impact Discussion: A search of the Native American Heritage Commission's (NAHC) Sacred Lands File was conducted on May 2, 2024, and returned positive results. The sacred lands search is conducted at U.S. Geological Survey topographic quadrangle section scale. Proposed treatment activities include treatments that could damage tribal cultural resources due to ground disturbance. Consistent with SPR CUL-2, an updated Native American contact list was obtained from the NAHC. On March 21, 2025, letters inviting the tribes to consult were mailed via certified mail and emailed to the tribal representatives indicated by the NAHC. As of April 10, 2025 two tribal entities responded to the project notification letters, and consultation with the County is ongoing.

The potential for the proposed treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource during implementation of vegetation treatment was examined in the PEIR. This impact is within the scope of the PEIR because the intensity of ground disturbance of the treatment project is consistent with that analyzed in the PEIR. As explained in the PEIR, although tribal cultural resources may be identified within the treatable landscape during development of later treatment projects, implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource. Specifically, SPR-6 requires that the project proponent, in consultation with the culturally affiliated tribe(s), develop effective protection measures for important tribal cultural resources located within treatment areas. Accordingly, recommendations provided during tribal consultation will be integrated into SPR CUL-6 and SPR CUL-8. SPRs applicable to this treatment include CUL-1 through CUL-6 and CUL-8. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact CUL-4: Disturb Human Remains	Impact CUL-4, pp. 3.5-18	SPR CUL-1 SPR CUL-3 SPR CUL-4	LTS	Yes	SPR CUL-1 SPR CUL-3 SPR CUL-4	LTS	☒

Impact Discussion: Vegetation treatment activities would include treatments using heavy equipment; these treatments may use tractors, skidders, dozers, and masticators, which could uncover human remains. The North Central Information Center records search did not reveal any burials or sites containing human remains. The potential for treatment activities to uncover human remains was examined in the PEIR. This impact is within the scope of the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. Additionally, consistent with the PEIR, the project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097 in the event of a discovery. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Archeological, Historical, and Tribal Cultural Resources: Would the project result in other impacts to archeological, historical, or tribal cultural resources that	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
are not evaluated in the CalVTP PEIR?							

Impact Discussion: The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the potential for archaeological, historical, or tribal cultural resources in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to cultural resources is also the same, as described above. Therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR CUL-1: Conduct Record Search. For treatments led by CAL FIRE, an archaeological and historical resource record search will be conducted per the "Archaeological Review Procedures for CAL FIRE Projects" (current edition dated 2010). This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR CUL-2: Contact Geographically Affiliated Native American Tribes. The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List, which may be obtained from the CAL FIRE website, as appropriate. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR-CUL-3: Pre-field Research. The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. This SPR applies to all treatment activities and treatment types	Yes	Nevada County OES Prior	Nevada County OES
SPR CUL-4: Archaeological Surveys. The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to	Yes	Nevada County OES Prior	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.			
SPR CUL-5: Treatment of Archaeological Resources. If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR CUL-6: Treatment of Tribal Cultural Resources. If a tribal cultural resource is identified within a treatment area, and cannot be avoided, the project proponent in consultation the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR CUL-7: Avoid Built Historical Resources. If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., building, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES During	Nevada County OES
SPR CUL-8: Cultural Resource Training. The project proponent will train all crew members and contractors implementing treatment	Yes	Nevada County OES Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
activities on the protection of sensitive archaeological, historical, or tribal cultural resources. This SPR applies to all treatment activities and treatment types.			
MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources. If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified professional archaeologist or CAL FIRE archaeological trained Registered Professional Forester will assess the significance of the find.	Yes	Nevada County OES During	Nevada County OES

3.4 Biological Resources

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

Impact Discussion: Treatment activities could result in direct or indirect impacts to two potentially occurring plant species listed under the California Endangered Species Act (CESA) or the federal Endangered Species Act (FESA) and to eight additional, non-listed special-status plants with a California Native Plant Society California Rare Plant

Rank of 1 or 2 that have a high to moderate potential to occur within the project site (Table 5 in Appendix C, Biological Resources Assessment Summary). Data review for all treatment areas were conducted in accordance with SPR BIO-1, and reconnaissance surveys were conducted for a substantial portion of the treatment areas (see Appendix C). A variety of soils and natural communities occur throughout the project site that may support special-status plants. Vegetation types vary across the project site, with lower montane coniferous forests being interspersed across a large portion of the site, chaparral and cismontane woodlands located primarily at the southern extent of the project site, and herbaceous communities mainly consisting of annual grasslands occurring at the southeast most part of the project site.

One species listed as endangered under both FESA and CESA, Stebbin's morning-glory (*Calystegia stebbinsii*), has a moderate potential to occur within the project site, and one species listed as endangered under CESA, Scadden Flat checkerbloom (*Sidalcea stipularis*), has a high potential to occur in wetted areas throughout the project site (CDFW 2025a; CNPS 2025). Additionally, the following eight non-listed special-status plant species have a moderate potential to occur throughout the project site: Spicate calycadenia (*Calycadenia spicata*), finger rush (*Juncus digitatus*), Cantelow's lewisia (*Lewisia cantelovii*), inundated bog-clubmoss (*Lyncopodiella inundata*), Sierra blue grass (*Poa sierrae*), brownish beaked-rush (*Rhynchospora capitellata*), True's mountain jewelflower (*Streptanthus tortuosus* ssp. *truei*), and oval-leaved viburnum (*Viburnum ellipticum*). Additional details are included in Appendix C.

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

SPR BIO-7, which requires protocol-level surveys for special-status plants, would apply to all treatment activities. Surveys for special-status plants in accordance with SPR BIO-7 would be sufficient to identify any occurrences of the two listed plant species, Stebbin's morning-glory and Scadden Flat checkerbloom, if present within the project site, so that avoidance measures in SPR BIO-7 and MM BIO-1a could be implemented. Surveys conducted under SPR BIO-7 would also be sufficient to identify the additional eight non-listed special-status plant species potentially occurring within the project site, and avoidance measures in MM BIO-1b would ensure avoidance of areas occupied by these plants. Protocol-level surveys for special-status plants would not be required under certain circumstances, such as those related to characteristics of the target species and timing of treatment activities. For instance, impacts to special-status plants could be avoided if the target species is an herbaceous annual, stump-sprouting species, or geophyte species, and if the treatment would occur during the dormant season for that species (or once the species has completed its annual life cycle). However, these circumstances only apply if the treatment would not alter habitat in a way that would make it unsuitable for special-status plants to reestablish following treatment or destroy seeds, stumps, or roots, rhizomes, bulbs, or other underground parts of special-status plants (e.g., hand treatment methods). SPR BIO-2, which requires worker training in sensitive biological resources, would further reduce the potential for impacts to special-status plants.

Identification of the location of rare plants in accordance with SPR BIO-1 and SPR BIO-7, and avoidance under MM BIO-1a and MM BIO-1b, would reduce or eliminate potential impacts to rare plants from habitat alteration. Several measures would reduce the potential for erosion to result in impacts to rare plants: SPR GEO-1, which would

suspend treatment during heavy precipitation; SPR GEO-2, which limits use of high ground-pressure vehicles; SPR BIO-3, which would require stabilization of soil disturbed during treatment; SPR GEO-4, which would require monitoring for erosion; and SPR GEO-7, which prescribes measures to minimize erosion on steep slopes. SPR AQ- 3 would require preparation of a burn plan for prescribed burns, in part to limit the potential for erosion.

Several additional project requirements would reduce potential indirect impacts to special-status plants. SPR BIO- 6 would prevent the spread of plant pathogens in areas with sensitive biological resources, and SPR BIO-9 would prescribe measures to prevent the spread of invasive plants. SPR AQ-4 includes dust control measures such as speed limits and use of water trucks if road use would create excessive dust. Additionally, SPR HAZ-1 would require regular maintenance of equipment, which would reduce the potential for fuel leaks and other spills from equipment. With implementation of the SPRs and the MMs described above, impacts to special-status plants from the project would be less than significant.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, pp. 3.6-139–3.6-187	SPR BIO-1, 2, 3, 4, 5, 8, 10, 11, 12 SPR HYD-1, 3, 4, 5 SPR HAZ-5, 6 SPR HYD-5 MM BIO-2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4	PS/SU	Yes	SPR BIO-1, 2, 3, 4, 5, 8, 10, 12 SPR GEO-1 SPR HYD-1, 3, 4, 5 SPR HAZ-5, 6 MM BIO-2a, 2b, 2c, 2e, 2g, 3a, 4, 5	LTSM	☒

Impact Discussion: Treatment activities could result in direct or indirect impacts to 10 potentially occurring special-status wildlife species, including species listed under CESA or FESA (Table 6 in Appendix C). Data reviews for all treatment areas were conducted in accordance with SPR BIO-1, and reconnaissance surveys were conducted for a substantial portion of the project site. In addition, the project proponent is in the process of consulting with the regulatory agencies (California Department of Fish and Wildlife and U.S. Fish and Wildlife Service), and would implement all agency recommendations into project design.

Special-Status Amphibians: Two special-status amphibian species have a potential to occur on the project site. California red-legged frog (*Rana draytonii*) is listed as threatened under FESA and is a California Species of Special Concern; it has moderate potential to occur on the project site. The only local record of California red-legged frog is approximately 11 miles north of the project site, where dozens of individuals were observed in a perennial pond within

conifer forest habitat in 2007 (CDFW 2025a). Suitable breeding, foraging, and dispersal habitat for California red-legged frog may be present within or near perennial, intermittent, and ephemeral ponds or drainages on the project site. California red-legged frogs may disperse 0.25 to 2 miles from a known aquatic breeding site (Bulger et al. 2003; Fellers 2005; Fellers and Kleeman 2007). Woodland habitat surrounding drainages with downed logs, woody debris, and areas of persistent summer moisture may serve as suitable upland refugia for California red-legged frogs.

The north Sierra distinct population segment of foothill yellow-legged frog (*Rana boylii*) is listed as endangered under CESA and has moderate potential to occur on the project site. There are several records of this species in water courses associated with the Rollins Reservoir, approximately 2 to 5 miles east of the project site (CDFW 2025a). Marginal rocky stream habitat within forest and woodland habitat is present on the project site, and surrounding upland woodland habitat may serve as refugia for foothill yellow-legged frogs, if present. Foothill yellow-legged frogs may disperse up to 1 mile from a known aquatic breeding site (CDFW 2018).

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

SPR GEO-1 would suspend treatment activities during heavy precipitation until soils are no longer saturated, which would reduce the potential for project activities to disturb ground supporting refugia occupied by amphibian species, and would reduce the potential for impacts to these species. Additionally, implementation of MM BIO-2a would avoid take of California red-legged frog and foothill yellow-legged frog by conducting treatment outside of occupied habitat or outside the sensitive period in the species' life history. To determine if a given treatment area is within suitable habitat for these species, upland refugia surveys would be conducted prior to implementing treatment within 50 feet of potential aquatic breeding feature, as recommended in Appendix C to comply with SPR BIO-10. These measures, and additional recommendations to avoid treatment during rain near potential California red-legged frog and foothill yellow-legged frog habitat, and to conduct upland refugia surveys within 50 feet of potential aquatic breeding habitat prior to implementing treatment, would help avoid take of California red-legged frogs and foothill yellow-legged frogs in the unlikely event that these species occur in the vicinity of the treatment areas. Any additional recommendations by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service for avoiding take of these species that are received during consultation would be incorporated into the project.

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

Special-Status Reptiles: One special-status reptile species, Northwestern pond turtle (*Emys marmorata*) (California Species of Special Concern), has moderate potential to occur on the project site. The nearest record of northwestern pond turtle is approximately 6 miles northeast of the project site in a watercourse associated with the Rollins Reservoir (CDFW 2025a). This species occurs in slow-moving permanent or intermittent drainages, ponds, lakes, and reservoirs, and uses surrounding upland habitat for nesting and refugia (see Appendix C). Implementation of SPR BIO-10, which would involve conducting a focused survey for special-status wildlife, may result in identification of additional locations where this species occurs.

Treatment activities could result in direct and indirect impacts to northwestern pond turtles and their habitat. Project activities could result in injury or mortality of individual northwestern pond turtles if present at the time of mechanical treatment, vegetation removal, and/or movement of large vehicles. Additionally, northwestern pond turtles may bury eggs in dirt, sand, or leaf litter in upland habitats immediately adjacent to aquatic features, and such nests could be crushed by large vehicles and equipment.

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

Special-Status Birds: Five special-status bird species are known to occur or may occur near the project site, including one state-listed and fully protected species and three California Species of Special Concern or watch list species. The state-listed and fully protected species is California black rail (*Laterallus jamaicensis coturniculus*), and the remaining special-status bird species are American goshawk (*Accipiter atricapillus*), Cooper's hawk (*Accipiter cooperii*), and Yellow-breasted chat (*Icteria virens*).

The project site contains a variety of suitable nesting and foraging habitat for the above-listed special-status bird species (see Appendix C). If any of these special-status bird species nest in or near the project site, noise and increased human activity associated with treatment activities could result in nest abandonment, which would result in the mortality of eggs or young if such activities occur during the bird nesting season (mid-February through August). Any loss of active special-status bird nests would be a significant impact under CEQA and potentially a violation of CESA and the California Fish and Game Code if the species is listed or fully protected (i.e., California black rail). However, implementation of SPR BIO-12, further described below under Impact BIO-6, would reduce this impact to less than significant.

Special-Status Bats: One special-status bat species has potential to occur on the project site: Townsend's big-eared bat (*Corynorhinus townsendii*), which is a California Species of Special Concern. This species may occur within the woodland and mixed forest habitats of the project site. Additionally, there is a record of Townsend's big-eared bat less than 1 mile north of the project site at the Empire Mine State Historic Park in 2016 (CDFW 2025a). The project may remove trees, which may result in the permanent loss of active bat roosts, if present. Increased noise from chainsaws and other equipment during treatment activities could cause temporary disturbance-related impacts on any bats roosting within the project site if they perceive such noise as a threat. Such impacts would be significant if they caused abandonment of a maternity roost with dependent young, which would reduce reproductive success of the local population and contribute to ongoing population declines of these species. However, implementation of SPR BIO-10, which would involve conducting a focused survey for special-status wildlife, would reduce this impact to less than significant.

Other Special-Status Mammals: One California fully protected mammal, northern California ringtail (*Bassariscus astutus raptor*), has potential to occur in woodland and riparian forest habitats on the project site. The project could result in impacts to this species, either by causing injury or harm to individuals of these species or substantially altering their habitats. Ringtails occupy tree hollows, rock crevices, and other animals' abandoned burrows in mixed forest and woodland habitat, some of which are present on the project site. This species is highly mobile and avoids human presence, so may be able to escape treatment activities in many cases, but mechanical treatment within mixed forest and woodland habitat could result in crushing of occupied tree hollows or occupied burrows, including natal dens. Implementation of SPR BIO-10, which would involve conducting a focused survey for special-status wildlife, would identify locations where these species occur.

Special-Status Invertebrates. One special-status invertebrate species, Western bumble bee (*Bombus occidentalis occidentalis*), has potential to occur on the project site. Implementation of MM BIO-2e and MM BIO-2g, which would involve conducting pre-work surveys for butterfly host plants and special-status bumble bee species habitat, would identify locations where these species would occur, and the appropriate avoidance buffers would be implemented. Therefore, potential impacts to special-status invertebrates would be less than significant with mitigation incorporated.

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	Impact BIO-3, pp. 3.6-187–3.6-192	SPR BIO-1, 2, 3, 4, 5, 6, 8, 9 SPR HYD-4, 5 MM BIO-3a, 3b, 3c	PS	Yes	SPR BIO-1, 2, 3, 4, 5, 6, 9 SPR HAZ-4 SPR HYD-4, 5 MM BIO-3a, 3b, 3c, 4, 5	LTSM	☒

Impact Discussion: Treatment conducted on the project site has the potential to result in impacts to sensitive natural communities. This could include loss of sensitive communities, such as riparian habitats and oak woodlands; degradation through removal of dominant and characteristic vegetation; and conversion of sensitive communities to common vegetation types. Sensitive communities are defined in the Manual of California Vegetation Online (CNPS 2025) and the California Sensitive Natural Community List (CDFW 2025b). Communities with a state ranking of S1 to S3 are considered sensitive. Data reviews for all treatment areas were conducted in accordance with SPR BIO-1, and reconnaissance surveys were conducted for a substantial portion of the treatment areas. Vegetation communities mapped included associations of the blue oak woodland and forest alliance, Douglas fir–tan oak forest–madrone forest and woodland, bigleaf maple forest and woodland, canyon live oak–interior live oak chaparral, California black oak forest and woodland, Fremont cottonwood forest and woodland, and Ponderosa pine forest and woodland, many of which are considered sensitive and are described in the California Sensitive Natural Community List (CDFW 2025b). A full list of the sensitive vegetation communities that are present throughout the project site, and the specific associations to which they belong, are provided in Appendix C.

Two riparian vegetation communities with the S3 ranking—associations of the bigleaf maple forest and woodland alliance and the Fremont cottonwood forest and woodland alliance—occur within the project site, adjacent to aquatic features. Treatment activities within these areas may have significant impacts on riparian habitat if substantial vegetation is removed from these communities.

SPR BIO-3 requires a survey for sensitive vegetation communities prior to treatment to ensure that these are identified and that treatment avoids these communities. SPR BIO-3 also requires that no fuel breaks occur in S1 (critically imperiled) or S2 (imperiled) communities. For the areas of the project site that contain riparian vegetation, SPR BIO-4 would be implemented to ensure that treatment is designed to avoid these areas. SPR BIO-5 would ensure that treatment is designed to maintain or enhance habitat function of chaparral communities. SPR BIO-6 requires that best management practices be employed to avoid the spread of plant pathogens, and SPR BIO-9 prescribes actions to prevent the spread of invasive plants.

In addition to these requirements, MMs would be implemented to ensure impacts to riparian habitats, sensitive natural communities, and oak woodlands are reduced to less than significant. MM BIO-3a would ensure that treatment is designed to avoid loss of sensitive natural communities and oak woodlands, including enhancement of communities to restore the natural fire regime and vegetation composition and structure. Implementation of MM BIO-3b and MM BIO-3c, which relate to compensation for loss of sensitive natural communities and oak woodlands and of riparian habitat, respectively, may be necessary if loss of sensitive natural communities and oak woodlands cannot be avoided. Per SPR BIO-3, the only exception to compensatory mitigation is in cases where a qualified RPF or botanist determines that the benefits to the sensitive natural community or oak woodland would outweigh potential loss during treatment activities. In that case, no compensatory mitigation would be required.

The project would not reduce the overall acreage of the sensitive natural communities described above and in Appendix C. The approach to treatment would promote forest health, and thus would enhance the existing communities. By retaining mature, healthy trees, and through implementation of the SPRs described above, treatment would retain species composition and the essential character of the forest. Additionally, the treatment would not exceed the maximum 20% threshold outlined in MM BIO-3a for removal of native vegetation within a sensitive natural community.

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, pp. 3.6-192–3.6-193	SPR BIO-1 SPR HYD-1, 3, 4 MM BIO- 4	PS	Yes	SPR BIO-1 SPR HYD-1, 4 MM BIO- 4	LTSM	☒

Impact Discussion: An aquatic resources delineation was not conducted for the project; however, the National Wetlands Inventory (USFWS 2025) and National Hydrography Dataset (USGS 2025) identify several aquatic resources potentially subject to U.S. Army Corps of Engineers, Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife jurisdiction throughout the project site (see Tables 2 and 3 in Appendix C). Potentially jurisdictional aquatic resources may be regulated under the Clean Water Act, Porter-Cologne Water Quality Act, and/or Section 1602 of the California Fish and Game Code. Wolf Creek is a perennial creek running through the watershed where the project site is located, beginning just north of the City of Grass Valley, flowing through the city, and turning south to eventually meet the Bear River at Nevada County's southern boundary. The creek and its tributaries (e.g., ephemeral and intermittent drainages), several of which run through the project site, drain a large portion of southwestern Nevada County. Other aquatic resources identified on the project site include freshwater emergent wetland, freshwater forest/shrub wetland, freshwater pond, canals, and ditches. Additional details about these features, including representative photos, are provided in Appendix C.

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

However, as described in the CalVTP PEIR, implementation of water quality protections in accordance with SPR HYD-1, identification of Watercourse and Lake Protection Zones (WLPZs) in accordance with SPR HYD-4, and delineation and avoidance of state and federally protected aquatic resources in accordance with MM BIO- 4 would ensure no impacts to the identified features. With implementation of these SPRs and the MMs, impacts to state and federally protected aquatic resources from the project would be less than significant with mitigation incorporated.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	Impact BIO-5, pp. 3.6-193–3.6-197	SPR BIO-1, 4, 5, 10, 11 SPR HYD-1, 4 MM BIO- 5	PS	Yes	SPR BIO-1, 4, 5, 10, SPR HYD-1, 2, 4 MM BIO- 5	LTSM	☒

Impact Discussion: The project site occurs primarily within a rural residential environment with numerous intersecting paved roads and disturbed driveways. Fence lines associated with private parcels occur within and

adjacent to the project site, and barbed-wire fences occur along property lines in various locations. However, few impediments to wildlife movement are present on the project site, which also consists of natural vegetation communities contiguous with surrounding undisturbed habitat. Larger and medium-size wildlife, such as mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*), Virginia opossum (*Didelphis virginiana*), black-tailed jackrabbit (*Lepus californicus*), and northern gray fox (*Urocyon cinereoargenteus*), are likely to move through the project site. Mountain lion (*Puma concolor*), a wide-ranging species, also likely occurs in the area on occasion. As previously described under Impacts BIO-3 and BIO-4, the project site contains numerous aquatic features and adjacent riparian habitat, which are likely used by wildlife species as corridors for both local and regional movement events, as well as important nursery sites for wildlife such as amphibians, fish, and many bird and invertebrate species. However, with the SPRs and MMs that would be implemented under Impacts BIO-3 and BIO-4 to fully avoid aquatic resources and riparian habitat, no substantial direct impacts to local or regional wildlife movement are expected to occur because of the project. Additionally, project activities would occur during daylight hours and would not introduce significant light or noise at night, when many local wildlife would be moving through the area.

As previously described under Impact BIO-2, special-status bat species have potential to roost throughout the project site, and in addition, several common bat species may use cavities of trees and various structures throughout the project site for maternity roosts. In general, the project site contains several human-made structures (e.g., barns, sheds) and trees with large cavities that could serve as important nursery sites for special-status and common bat species. The project may involve removal of trees, which may result in the permanent loss of active bat roosts, if present. Increased noise from chainsaws and other equipment during treatment activities could cause temporary disturbance-related impacts on any bats roosting in or adjacent to the project site if they perceive such noise as a threat. Such impacts would be significant if they caused abandonment of a maternity roost with dependent young, which would reduce reproductive success of the local population and contribute to ongoing population declines of these species. However, implementation of SPR BIO-10, which requires focused or protocol-level surveys for special-status wildlife species and nursery sites (e.g. bat maternity roosts), would reduce this impact to less than significant.

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-6: Substantially Reduce	Impact BIO-6, pp. 3.6-	SPR BIO-1, 2, 3, 4, 5, 12	LTS	Yes	SPR BIO-1, 2, 3, 4, 5, 12	LTS	☒

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Habitat or Abundance of Common Wildlife, Including Nesting Birds	197–3.6-199				MM BIO-3a, 3b, 3c, 4		

Impact Discussion: The project could result in direct and indirect impacts to common wildlife, including nesting birds. The various habitats that occur within the project site, consisting mostly of Ponderosa pine forest, montane hardwood, blue oak woodland, and limited areas of annual grassland and mixed chaparral, support a variety of common wildlife, including nesting birds. All treatment activities, including manual treatment and limbing of oaks and pines, mechanical treatment, and prescribed burning, if conducted during the nesting bird season (mid-February through August), could result in direct loss of active bird nests or cause disturbance (i.e., noise and increased human presence) resulting in nest abandonment and failure.

Extensive areas of similar habitats occur adjacent to the project site, and substantial similar habitats would remain in surrounding areas that are available to common wildlife species during and after treatment. In addition, implementation of SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-5, and SPR BIO-12 would limit the loss and degradation of high-quality habitat for common species on the project site. SPR BIO-2 would require worker training in sensitive biological resources. SPR BIO-3 would ensure mapping of sensitive habitats. SPR BIO-5 would avoid type conversion in scrub habitats and therefore maintain habitat function. Therefore, project treatment would remove vegetation and alter habitat structure locally, but would not result in permanent habitat degradation or conversion. Vegetation would be retained in a mosaic pattern in forest and woodland communities, and quality of habitat may improve in the long term in some cases. Overall diversity and abundance of common birds and other wildlife would not substantially change in the long term.

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

With implementation of the above SPRs and MMs, impacts to habitat or abundance of common wildlife, including nesting birds occurring within the project site, would be less than significant.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, pp. 3.6-199	SPR AD- 3	No Impact	Yes	SPR AD- 3	N/A	☒

Impact Discussion: The Nevada County Code of Ordinances Division 4.3, Section 12.04.215 identifies the importance of retaining and protecting existing trees to provide suitable habitat for native wildlife and to minimize disturbance of landmark and heritage trees and groves (County of Nevada 2023). The ordinance regulates tree removal, identifies County of Nevada landmark and heritage trees and groves, requires a permit process for removing protected trees, and poses restrictions on heritage tree removal. However, Section 12.04.218 describes requirements in Nevada County for wildland fire hazard areas to prevent or minimize the impact of wildland fire hazards throughout Nevada County. This ordinance defines wildland fire hazard areas as those areas within the unincorporated area of Nevada County that are mapped on CAL FIRE's Fire Hazard Severity Zone maps, which are rated for wildland fire protection. The project site is designated in a very high state responsibility area, and therefore qualifies for the County of Nevada fire-protection provisions, including fuel reduction and hazardous vegetation abatement actions.

The project would focus on retention of native trees as best as possible, and only the minimum necessary trees would be removed. In addition, the project would be designed to incorporate all provisions of the County of Nevada Code of Ordinances. Therefore the project would not conflict with any local policies or ordinances.

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

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	Impact BIO-8, pp. 3.6-199 – 3.6-200	N/A	No Impact	No	N/A	N/A	☒

Impact Discussion: No natural community conservation plans, habitat conservation plans, or other approved habitat plans occur within the project site.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Biological Resources: Would the project result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: Site-specific characteristics of the proposed project are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR Section 3.6, and no new impacts related to biological resources would occur. Although the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions of the project site relating to biological resources are essentially the same for treatment areas within and outside of the CalVTP treatable landscape. As a result, impacts associated with the project are consistent with the impacts covered in the PEIR. No new impact related to biological resources would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR BIO-1: **Review and Survey Project-Specific Biological Resources.** 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. 2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. This SPR applies to all treatment activities and treatment types.	Yes Yes No	Nevada County OES Prior	Nevada County OES
SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design	Yes	Nevada County OES Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. These SPR requirements apply to all treatment activities and all treatment types. Additional measures will be applied to ecological restoration treatment types			
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement best management practices to prevent the spread of *Phytophthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle). This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR BIO 8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally	No	N/A	N/A

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.			
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
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. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.	No	N/A	N/A

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR BIO-12: Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season or peak nesting season will be defined by the qualified RPF or biologist. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA. If listed plants are determined to be present through application of SPR BIO- 1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway).	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA. If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the PEIR) are determined to be present through application of SPR BIO- 1 and SPR BIO-7, the project proponent will implement measures to avoid loss of individuals and maintain habitat function of occupied habitat.	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants. If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under MM BIO-1a and MM BIO-1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the	No	N/A	N/A

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.			
MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities).	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities). If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the PEIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.	Yes	Nevada County OES Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
MM BIO-2c: Compensate for Mortality, Injury, Or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities). If the provisions of MM BIO-2a, MM BIO-2b, and MM BIO-2d through MM BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.	No	N/A	N/A
MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Types).	No	N/A	N/A
MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Types).	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO 2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities).	No	N/A	N/A
MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities).	Yes	Nevada County OES Prior-During	Nevada County OES
MM Bio-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory),	No	N/A	N/A
MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands. The project proponent will implement the specified measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3. The only exception to this mitigation approach is in cases where it is	Yes	Nevada County OES Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.			
MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands.	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat.	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-4: Avoid State and Federally Protected Wetlands.	Yes	Nevada County OES Prior-During	Nevada County OES
MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites.	Yes	Nevada County OES Prior-During	Nevada County OES

3.5 Geology, Soils, Paleontology, and Mineral Resources

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	Impact GEO-1, pp. 3.7-26 –3.7-29	SPR AD-3 SPR GEO-1 through SPR GEO-8 SPR HYD-3 SPR HYD-4 SPR AQ-3 SPR AQ-4	LTS	Yes	SPR AD-3 SPR GEO-1 through SPR GEO-8 SPR HYD-4 SPR AQ-3 SPR AQ-4	LTS	☒

Impact Discussion: Initial treatment activities during Phase 1 would include mechanical treatment and manual treatment. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance.. Each of these activities would result in vegetation removal and soil disturbance. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. Potential impacts related to soil erosion during implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the type of equipment, extent of vegetation removal, and intensity of prescribed burning proposed are consistent with those analyzed in the PEIR.

Treatment activities would potentially leave loose soil exposed to the erosive forces of rainfall and high winds, which would increase the potential for soil erosion and loss of topsoil. A soils report and steep slopes analysis were completed for the project (see Appendix E, Custom Soil Resource Report, and Figure 5, Slopes). Nevada County OES would implement SPRs to control erosion and sediment during treatment activities. SPRs applicable to this treatment project are SPRs AD-3, GEO1 through GEO-8, HYD-4, AQ-3, and AQ-4. SPR GEO-1 requires suspension of mechanical soil disturbance during precipitation, SPR GEO-2 limits high ground-pressure vehicles, SPR GEO-3 requires stabilization of mechanically disturbed soil areas, SPR GEO-4 requires inspection prior to the rainy season and immediately following the first large rainfall event, SPR GEO-5 requires draining runoff via stormwater breaks, SPR GEO-6 limits burn pile size, SPR GEO-7 limits the use of mechanical equipment on steep slopes, and SPR GEO- 8 requires a Registered Professional Forester (RPF) or licensed geologist (Professional Geologist [PG] or Certified Engineering Geologist [CEG]) to inspect steep slopes. SPR AQ-3 requires preparation of a Burn Plan and SPR AQ-4 requires measures to minimize dust created on unpaved surfaces. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial erosion or loss of topsoil, especially in areas of steep slopes or erodible soils. Based on the soils report in Appendix E, the main soil types on the project site are the Josephine–Mariposa complex (15% to 50% slopes, eroded), Sites very stony loam (15% to 50% slopes), Josephine rock-outcrop complex (15% to 50% slopes), and Sites silt loam (15% to 30% loam). Slopes for the treatment areas vary, as shown in Figure 5 (USDA NRCS 2025). Based on the slopes analysis presented in Figure 5, treatment areas with slopes exceeding 50% are primarily concentrated in the southern portion of the project site along Mt. Olive Road and in the northeastern portions of the project site along Lower Colfax Road.

Prior to implementing treatment activities in areas with slopes greater than 50%, treatment areas would be evaluated by a RPF (Mason, Bruce & Girard is currently on contract and is preparing the treatment prescription for the project) to evaluate for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard) (SPR GEO-8). If unstable areas or soils are identified within the treatment area, are unavoidable, and would be potentially directly or indirectly affected by the treatment, a licensed geologist (PG or CEG) will determine the potential for landslide, erosion, or other issues related to unstable soils and identify measures (e.g., those in SPR GEO-7) to be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. Areas with slopes greater than 65% would receive manual treatments only, and areas with slopes greater than 50% identified as having a high or extreme erosion hazard rating would also receive manual treatments only, in accordance with SPR GEO-7. A chipper may be used in conjunction with manual treatments on slopes greater than 50%. However, if a chipper is used it would be staged outside the steep slope areas and crews would manually move vegetation material to the chipper or stack it in piles for pile burning. Additionally, treatment activities would be conducted such that root systems would be left in place and uprooting resulting in soil disturbance would be minimized to the extent feasible.

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

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

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact GEO-2: Increase Risk of Landslide	Impact Geo-2, pp. 3.7-29 – 3.7-30	SPR GEO-3 SPR GEO-4 SPR GEO-7 SPR GEO-8 SPR AQ-3	LTS	Yes	SPR GEO-3 SPR GEO-4 SPR GEO-7 SPR GEO-8 SPR AQ-3	LTS	☒

Impact Discussion: The soils report generated for this area did not indicate previous instances of slips and slides, and the U.S. Landslide Inventory from the U.S. Geological Survey does not show a history of recorded landslide data or occurrences on the project site (USGS 2024). Although the project site appears to lack a history of landslides, precautions should still be taken when preparing the area, doing work before and after heavy precipitation events, and using heavy machinery to be mindful of soil disturbance.

The potential for vegetation removal to affect slope stability and increase the risk of landslide was examined in the PEIR. SPRs GEO-3, GEO-4, GEO-7, and GEO-8 would be implemented to reduce the likelihood of erosion and risk of landslides. SPR GEO-3 requires stabilization of mechanically disturbed soil, SPR GEO-4 requires erosion inspections, SPR GEO-7 would minimize erosion by prohibiting mechanical treatment on steep slopes, and SPR GEO-8 requires that an RPF or licensed geologist (PG or CEG) evaluate treatment areas with slopes greater than 50% for unstable areas. SPR AQ-3 requires preparation of a Burn Plan prior to conducting any prescribed burning to minimize soil burn severity, resulting in some vegetation remaining that retains root structures and reducing the potential for runoff or erosion. Potential impacts related to landslides during implementation of the treatments are within the scope of the activities and impacts addressed in the PEIR because the extent of vegetation removal, intensity of prescribed burning, and avoidance of steep slopes and areas of instability are consistent with those analyzed in the PEIR. SPRs applicable to this treatment project (SPRs GEO-3, GEO-4, GEO-7, GEO-8, and AQ-3) would reduce the likelihood of landslides occurring as a result of proposed activities, and impacts would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Geology, Soils, Paleontology, And Mineral Resources: Would the project result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	N/A	N/A	N/A	☒

Impact Discussion: The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The project proponent has considered the site-specific characteristics of the proposed treatment project and determined that they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the project site, the existing environmental and regulatory conditions pertinent to geology, soils, paleontology, and mineral resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in any new significant impacts not addressed in the PEIR. Therefore, no new impacts related to geology, soils, paleontology, or mineral resources would occur that are not covered in the PEIR.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GEO-1: Suspend Disturbance during Heavy Precipitation. The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. This SPR	Yes	Nevada County OES During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types.			
SPR GEO-2: Limit High Ground Pressure Vehicles. The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR GEO-3: Stabilize Disturbed Soil Areas. The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.	Yes	Nevada County OES During-Post	Nevada County OES
SPR GEO-4: Erosion Monitoring. The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES During-Post	Nevada County OES
SPR GEO-5: Drain Stormwater via Water Breaks. The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR GEO-6: Minimize Burn Pile Size. The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GEO-7: Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR GEO-8: Steep Slopes. The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR AQ-4: Minimize Dust. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones. The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916.5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR AD-3: Consistency with Local Plans, Policies, and Ordinances. The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES Prior-During	Nevada County OES

3.6 Greenhouse Gas Emissions

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

Impact Discussion: The use of vehicles, mechanical equipment, and prescribed burning would result in GHG emissions. Consistency with plans, policies, and regulations governing GHG emissions was examined in the PEIR. The project would be consistent with the applicable policies, plans, and regulations to reduce GHG emissions as described in California's 2017 Climate Change Scoping Plan (CARB 2017), the California Forest Carbon Plan (Forest Climate Action Team 2018), and the Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (CARB 2019). Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment, duration of use, duration of prescribed burning, and resultant GHG emissions, are consistent with those analyzed in the PEIR. The proposed project would be implemented so as not to conflict with application plans, policies, and/or regulations and the impact would be less than significant.

SPR GHG-1 is not applicable to the proposed project, because Nevada County OES is not subject to providing information to inform reporting under the California Board of Forestry and Fire Protection's AB 1504 Carbon Inventory Process because this project is not a registered offset project. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact GHG-2: Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, pp. 3.8-11–3.8-17	SPR AQ-3 MM GHG-2	PSU	Yes	SPR AQ-3 MM GHG-2	PSU	☒

Impact Discussion: The intent of vegetation treatments under the proposed project is to reduce wildfire risk, which would reduce GHG emissions related to wildfires. The proposed project would result in the generation of GHG emissions from treatment activities through the use of vehicles, mechanical equipment, and prescribed burning. Prescribed burning would produce the most GHG emissions, because the combustion of vegetation produces smoke, which contains CO_2 and methane (CH_4). The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR and found to be potentially significant and unavoidable after the application of all feasible MMs because of the infeasibility of implementing specific emission reduction techniques and the uncertainties associated with all the parameters and objectives of prescribed burning. The project proponent would document and implement GHG reduction techniques to reduce GHG emissions associated with prescribed burning per SPR AQ-3 (which requires preparation of a Burn Plan) and MM GHG-2 (which describes methods for reducing GHG emissions and requires that the project proponent document methods used to reduce GHG emissions in the Burn Plan). MM GHG-2 would be implemented by using air curtain burners when feasible to reduce GHG emissions associated with pile burning, as discussed in Impact AQ-4. However, although mitigation actions would be implemented to reduce GHG emissions, the treatments would still contribute to the annual emissions generated by the CalVTP and would remain potentially significant and unavoidable. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR, because the proposed activities, as well as the associated equipment and duration of use and the intent of the treatments to reduce wildfire risk and GHG emissions related to wildfire, are consistent with those analyzed in the PEIR. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

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

Impact Discussion: The proposed project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR, Section 3.8. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions pertinent to the climate conditions that are present in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to GHG emissions would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GHG-1: Contribute to the AB 1504 Carbon Inventory Process. The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and the Fire and Resource Assessment Program (FRAP) to fulfill requirements of	No	N/A	N/A

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.			
MM GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES

3.7 Energy Resources

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	Impact ENG-1, pp. 3.9-7–3.9-8	N/A	LTS	Yes	N/A	LTS	☒

Impact Discussion: The proposed project would require the consumption of energy through the use of fossil fuels associated with the use of vehicles, mechanical equipment, handheld equipment (e.g., personal vehicles, chainsaws, masticators, skidders, grinders), and trucks (e.g., water trucks, a fire engine, off-road equipment/vehicles). Diesel and petroleum-based fuels, such as gasoline, would be consumed during the use of heavy-duty equipment and trucks, mechanical equipment, and the transport of personnel and equipment to and

from and within the project site. The primary objectives of the proposed project are to reduce wildfire risk and decrease the intensity of fires. Wildfire response requires an immediate response from emergency personnel and mobilization of equipment from across the state and even across the nation, which often results in inefficient consumption of energy. Implementation of treatment activities would reduce wildfire risk and therefore would reduce the potential for inefficient consumption of energy from emergency response to wildfire. There are no SPRs applicable to this impact and the impact would be less than significant, which is consistent with the PEIR. No new impacts related to the use of energy resources would occur.

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Energy Resources: Would the project result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: The proposed project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR, Section 3.9. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions that are present in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to energy resources would occur. The inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR.

3.8 Hazardous Materials, Public Health, and Safety

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, pp. 3.10-14–3.10-15	SPR HAZ-1 SPR HYD-4	LTS	Yes	SPR HAZ-1 SPR HYD-4	LTS	☒

Impact Discussion: Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance.. Treatment activities and transportation of equipment would require the use of hazardous materials, including fuels, oils, and lubricants, as well as accelerants for prescribed burns. Potential impacts related to use of such materials during treatment activities are within the scope of the activities and impacts addressed in the PEIR because the types of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. SPR HAZ-1 is applicable to the project and requires that all equipment be properly maintained and regularly inspected for leaks. Additionally, the project proponent would ensure that the transport and use of hazardous materials would be conducted in compliance with existing federal, state, and local regulations governing hazardous material use, storage, disposal, and transport to prevent project-related risks to public health and safety.

Additionally, per SPR HYD-4, protection zones for watercourses would be established which would provide buffers around watercourses where work would be restricted or limited, as detailed in Appendix G, Treatment Plan. Watercourses and potential drainages leading to watercourses have been identified during field surveys and identified on project maps (Appendix C Biological Resources Assessment Summary; Appendix G, Treatment Plan). Therefore, it is not anticipated that the proposed project would result in a significant health hazard from the use of hazardous materials, and impacts would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, pp. 3.10-16–3.10-18	SPR HAZ-5 SPR HAZ-6 SPR HAZ-7 SPR HAZ-8 SPR HAZ-9	LTS	Yes	SPR HAZ-5 SPR HAZ-6 SPR HAZ-7 SPR HAZ-8 SPR HAZ-9	LTS	☒

Impact Discussion: The proposed project may include application of herbicide by use of a backpack hand applicator. The use of herbicide treatments is not included in Phase 1, but may occur at a later date during treatment maintenance. Pesticides would be transported by truck. Initial and maintenance treatments would include the application of herbicides using ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems. No aerial spraying of herbicides would occur. The potential for treatment activities to cause a significant health hazard from the use of herbicides was examined in the PEIR. This impact is within the scope of the PEIR because the types of herbicides and application methods that would be used, which are limited to ground-based applications, are consistent with those analyzed in the PEIR. In addition, herbicides would be applied by licensed applicators in compliance with all laws, regulations, and herbicide label instructions, consistent with herbicide use described in the PEIR. SPRs HAZ-5 through HAZ-9 are applicable to the herbicide application included in the proposed project. Following SPR HAZ-5, Nevada County OES or a licensed Pest Control Advisor will prepare a Spill Prevention and Response Plan prior to beginning any herbicide treatment activities. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, pp. 3.10-18–3.10-19	MM HAZ-3	PS	Yes	MM HAZ-3	LTSM	☒

Impact Discussion: The project site occurs entirely on privately owned parcels, and the public has access to areas adjacent to the treatment areas, which are immediately adjacent to existing public roadways. However, public access onto treatment sites is limited, because treatment activities would occur on private property. Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance. Treatment activities would result in soil disturbance and could expose workers or the environment to hazards from a hazardous materials site if present on the project site. The potential for the proposed treatment activities to encounter contamination that could expose workers or the environment to hazardous materials was examined in the PEIR. This impact was identified as potentially significant in the PEIR because hazardous materials sites could be present within treatment sites and soil disturbance or burning in those areas could expose people or the environment to hazards.

Although public access to the treatment areas is limited, MM HAZ-3 is applicable to the project. Per MM HAZ-3, searches of the California Department of Toxic Substances Control's EnviroStor and the State Water Resources Control Board's GeoTracker online databases were conducted (DTSC 2025; SWRCB 2025). These databases contain information regarding the location and status of hazardous materials sites included on the Cortese List (California Government Code Section 65962.5). A review of EnviroStor databases showed that the project site does not contain any known hazardous materials sites. The nearest known active cleanup sites are 0.91 miles northwest (DTSC 2025) and 1.64 miles northwest of the proposed treatment areas (DTSC 2025). Due to the distances between the project site and any known hazardous materials sites, off-site contamination is not likely to pose a risk to workers within the treatment areas. The GeoTracker database indicated that there were 13 known leaking underground storage tank (LUST) cleanup sites and 5 additional cleanup program sites within a 3-mile radius of the project site, although all are outside of the project site (SWRCB 2025). Of these 18 total sites, 7 are relatively close to the project site. One LUST site exists approximately 0.70 miles north of the project site, in the Union Hill Community area. One site is approximately 0.25 miles north of the northern project site boundary in the Cedar Ridge community area. Two are east of this area in Kres: one is close to the Brunswick Road and SR-174 intersection, approximately 0.27 miles north of the nearest project site boundary, and the second is on the other side of Brunswick Road next to the Kingdom Hall of Jehovah's Witnesses, approximately 0.35 miles north of the nearest project site boundary. Two LUST sites are close to one another between Kres and Peardale, just north of SR-174, and are approximately 0.17 miles east of the northeastern project site boundary. Another LUST site is approximately 0.54 miles west of the southwestern project site boundary. The last LUST site is 0.97 miles east of the eastern project site boundary in the Chicago Park Community area. The additional cleanup program site is approximately 0.25 miles east of the northeastern project site boundary. All 18 LUST cleanup sites and four cleanup program sites are closed cases. One cleanup program site is noted as "Open – Site Assessment as of 05/12/2010." Names and locations of all sites from the EnviroStor and GeoTracker databases are included in Appendix F, Hazardous Materials Sites. Further, the proposed project would result in limited ground disturbance and would be unlikely to pose a risk to workers related to disturbance of hazardous materials sites. Therefore, the impact would be less than significant with mitigation and is consistent with the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Hazardous Materials, Public Health and Safety: Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: The proposed project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting examined in Section 3.10 of the PEIR. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to the use of hazardous materials and proximity to known hazardous material sites in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to hazards and hazardous materials would occur. The use of hazardous materials and proximity to known hazardous material sites would be the same for the project site inside and outside of the CalVTP treatable landscape. Therefore, the project would not result in impacts related to hazards and hazardous materials that were not addressed in the PEIR.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HAZ-1: Maintain All Equipment. The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. This	Yes	Nevada County OES, local fire agency staff, contractor crews Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR applies to all treatment activities and treatment types.			
SPR HAZ-2: Require Spark Arrestors. This SPR applies only to manual treatment activities and all treatment types	Yes	Nevada County OES, local fire agency staff, contractor crews During	Nevada County OES
SPR HAZ-3: Require Fire Extinguishers. The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types.	Yes	Nevada County OES, local fire agency staff, contractor crews During	Nevada County OES
SPR HAZ-4: Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES, local fire agency staff, CAL FIRE crews During	Nevada County OES
SPR HAZ-5: Spill Prevention and Response Plan. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES
SPR HAZ-6: Comply with Herbicide Application Regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES During	Nevada County OES
SPR HAZ-7: Triple Rinse Herbicide Containers. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES During	Nevada County OES
SPR HAZ-8: Minimize Herbicide Drift into Public Areas. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES During	Nevada County OES
SPR HAZ-9: Notification of Herbicide Use in the Vicinity of Public Areas. For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project	Yes	Nevada County OES Prior-During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. *This* SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.			
MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites. Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials.	Yes	Nevada County OES Prior	Nevada County OES
SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones. The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916.5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES

3.9 Hydrology and Water Quality

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-1: Violate Water	Impact HYD-1,	SPR AQ-3 SPR HYD-4	LTS	Yes	SPR AQ-3 SPR HYD-4	LTS	☒

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
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	pp. 3.11-25–3.11-27	SPR BIO-4 SPR BIO-5 SPR GEO-4 SPR GEO-6 MM BIO-3b			SPR HYD-6 SPR GEO-4 SPR GEO-6		

Impact Discussion: The project site is in the Wolf Creek HUC-10 watershed (1802012602) and more specifically in the HUC-12 subwatersheds for Rattlesnake Creek-Wolf Creek (180201260202) and South Wolf Creek (180201260201) (USGS 2025a). Wolf Creek is the main creek running through the watershed where the project is located, beginning just north of the city of Grass Valley, flowing through the city, and turning south to eventually meet the Bear River creek and its tributaries (see Appendix C Biological Resources Assessment Summary for further details).

Intermittent drainages exist throughout the project site that capture rainfall in winter and spring but are dry in the summer months. These drainages could eventually reach surface waters or groundwater. The project site is not within a groundwater basin (DWR 2019).

Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date. Although pile burning could result in localized high-severity burn conditions, SPRs would be implemented to avoid potential impacts, as follows. Pile sites would be limited in size (per SPR GEO-6) and dispersed throughout the landscape, which would reduce hydrologic connectivity. A Burn Plan would be developed prior to any prescribed burns (SPR AQ-3) and soil burn severity would be minimized to reduce the potential for runoff and soil erosion. Additionally, SPR HYD-4, which prohibits the placement of burn piles within WLPZs, would be implemented as part of project design. WLPZs ranging from 50 to 150 feet wide would be implemented for any watercourses that are within treatment areas, pursuant to SPR HYD-4. Potential impacts to water quality of off-site waterways during implementation of the treatment project are within the scope of the

activities and impacts addressed in the PEIR because the proposed treatment activities and associated impacts to water quality are consistent with those analyzed in the PEIR. SPRs applicable to this treatment project include SPRs AQ-3, HYD-4, HYD-6, GEO-4, and GEO-6.

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	Impact HYD-2, pp. 3.11-27–3.11-29	SPR HYD-1 SPR HYD-4 SPR HYD-5 SPR BIO-1 SPR GEO-1 through SPR GEO-4 SPR GEO-7 SPR GEO-8 SPR HAZ-1 SPR HAZ-5	LTS	Yes	SPR HYD-1 SPR HYD-4 SPR HYD-5 SPR BIO-1 SPR GEO-1 through SPR GEO-5 SPR GEO-7 SPR HAZ-1 SPR HAZ-5	LTS	☒

Impact Discussion: The proposed project includes manual and mechanical treatment activities in Phase 1 as well as treatment maintenance activities. Within the project vicinity there are several significant hydrologic features (SWRCB 2017). Watercourses have been identified in desktop analysis and field surveys (see Figure 3, Appendix C). The Project area contains Class I, II, III, and IV streams, and a total of approximately 24 acres of Watercourse and Lake Protection Zones (WLPZ, Class I and II streams) and/or Equipment Limitation Zones (ELZs, Class III and IV streams)

(Appendix G). Per SPR HYD-4, the consulting RPF, Mason, Bruce, and Girard, has identified and will establish WLPZs and ELZs on either side of watercourses. The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR. Per SPR HYD-4, WLPZs ranging from 50 to 150 feet wide would be established for Class 1 and Class 2 waterways. . Work buffers have also been identified for Class 3 and class 4 waterways. See Appendix G for further details. Additionally, the project would be implemented in compliance with all state and regional water quality regulations, including waste discharge requirements (WDRs) per the Central Valley RWQCB (SPR HYD-1). This was renewed in 2017 by the Central Valley RWQCB General Order WDRs for Timberland Management Activities on Non-Federal and Federal Lands (SWRCB 2017). Additionally, the project would be automatically enrolled in the State Water Resources Control Board's Vegetation Treatment General Order.

The project would limit ground disturbance during and after precipitation (SPR GEO-1 and SPR GEO-2) and treatment areas would be inspected for erosion and remediated prior to the rainy season and following the first large storm or rainfall event (SPR GEO-4). Equipment operation would be limited to slopes less than 65%, and treatment areas with slopes greater than 50% would be inspected by an RPF or licensed geologist (PG or CEG) to determine erosion hazard prior to implementing treatments (SPR GEO-7) to reduce the potential for erosion. Qualified RFPs from Mason, Bruce & Girard are currently under contract for the project to design the treatment prescription in accordance with these SPRs. Additionally, highly disturbed areas would be stabilized with mulch, if needed (SPR GEO-3). The project does not include the construction of new roads; therefore, SPR HYD-2 does not apply to the proposed project. Although no linear or bare (non-shaded fuel breaks) treatments are proposed, SPR GEO-5 would be implemented to minimize erosion. Additionally, per SPR HAZ-1, all equipment would be maintained to ensure there are no leaks or spills that could impact water quality. Following SPR HAZ-5, Nevada County OES or a licensed Pest Control Advisor will prepare a Spill Prevention and Response Plan prior to beginning any herbicide treatment activities

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or	Impact HYD-3, pp. 3.11-29	SPR HYD-3	LTS	No	N/A	N/A	☒

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory							

Impact Discussion: This impact does not apply to the proposed project because the project would include manual, mechanical, and chemical treatments and prescribed burns; the use of prescribed herbivory is not proposed as part of the project. Therefore, SPR HYD-3 is not applicable to the proposed project. No new impacts related to prescribed herbivory would occur that are not covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control	Impact HYD-4, pp. 3.11-30–3.11-31	SPR HYD-5 SPR BIO-4 SPR HAZ-5 SPR HAZ-7	LTS	No	SPR HYD-5 SPR BIO-4 SPR HAZ-5 SPR HAZ-7	LTS	☒

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

Impact Discussion: The proposed project may involve application of herbicide by use of a backpack hand applicator. Pesticides would be transported by truck. Initial and maintenance treatments would include the application of herbicides using ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems. No aerial spraying of herbicides would occur. Herbicides would be applied by licensed applicators in compliance with all laws, regulations, and herbicide label instructions, consistent with herbicide use as described in the PEIR. The potential for herbicide uses to violate water quality standards or WDRs, degrade water quality, or conflict with the implementation of a water quality control plan was examined in the PEIR. This impact is within the scope of the PEIR because the use of herbicides to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR. Therefore, the water quality impact from the use of herbicides is also the same, as described above. SPRs applicable to this treatment project are HYD-5, BIO-4, HAZ-5, and HAZ-7. SPR HYD-5 requires protection of non-target vegetation and special-status species from herbicides. SPR BIO-4 requires consultation of a qualified RPF or biologists to design treatments to retain or improve habitat functions in riparian habitats. SPR HAZ-5 and HAZ-7 are applicable to herbicide application included in the proposed project. Following SPR HAZ-5, Nevada County OES or a licensed Pest Control Advisor would prepare a Spill Prevention and Response Plan prior to beginning any herbicide treatment activities. Per SPR HAZ-7, herbicide containers would be cleaned and disposed of properly. This determination is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	Impact HYD-5, pp. 3.11-31	SPR HYD-4 SPR HYD-6 SPR GEO-5	LTS	Yes	SPR HYD-4 SPR HYD-6 SPR GEO-5	LTS	☒

Impact Discussion: Proposed treatments during Phase 1 would include mechanical and manual. Chemical treatment and prescribed burning may occur at a later date during project maintenance activities. Proposed treatments would cause ground disturbance and could alter drainage patterns. However, as described in the PEIR, these activities would have minor impacts to on-site drainage with implementation of SPRs. The potential for treatment activities to substantially alter the existing drainage pattern of a project site was examined in the PEIR. Potential impacts to site drainage during implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the types and intensity of treatments are consistent with those analyzed in the PEIR.

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

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

Impact Discussion: The project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting examined in Section 3.11 of the PEIR. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to hydrology and water quality in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape;

therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to hydrology and water quality would occur. Therefore, the project would not result in other impacts related to hydrology and water quality not addressed in the PEIR. The impacts associated with the proposed treatment actives were also determined to be consistent with the PEIR and would not result in a more significant impact.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HYD-1: Comply with Water Quality Regulations. Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR HYD-2: Avoid Construction of New Roads. The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR HYD-3: Water Quality Protections for Prescribed Herbivory. This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.	No	N/A	N/A
SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones. The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916.5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR HYD-5: Protect Non-Target Vegetation and Special-status Species from Herbicides. This SPR applies to herbicide treatment activities and all	No	N/A	N/A

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
treatment types, including treatment maintenance.			
SPR HYD-6: Protect Existing Drainage Systems. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR BIO-1: Review and Survey Project-Specific Biological Resources. 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. 2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. This SPR applies to all treatment activities and treatment types.	Yes Yes No	Nevada County OES Prior	Nevada County OES
SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. These SPR requirements apply to all treatment activities and all treatment types. Additional measures will be applied to ecological restoration treatment types.	Yes	Nevada County OES Prior	Nevada County OES
MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands.	No	N/A	N/A
SPR GEO-1: Suspend Disturbance during Heavy Precipitation. The project proponent will suspend mechanical, prescribed herbivory, and herbicide	Yes	Nevada County OES During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types.			
SPR GEO-2: Limit High Ground Pressure Vehicles. The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR GEO-3: Stabilize Disturbed Soil Areas. The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.	Yes	Nevada County OES During-Post	Nevada County OES
SPR GEO-4: Erosion Monitoring. The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES During-Post	Nevada County OES
SPR GEO-5: Drain Stormwater via Water Breaks. The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6© of the California Forest Practice Rules. This SPR applies only to mechanical, manual,	Yes	Nevada County OES During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
and prescribed burn treatment activities and all treatment types.			
SPR GEO-6: Minimize Burn Pile Size. The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR GEO-7: Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR GEO-8: Steep Slopes. The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	No	N/A	N/A
SPR HAZ-1: Maintain All Equipment. The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES, local fire agency staff, contractor crews Prior-During	Nevada County OES
SPR HAZ-5: Spill Prevention and Response Plan. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES
SPR HAZ-7: Triple Rinse Herbicide Containers. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES During	Nevada County OES

3.10 Land Use and Planning, Population, and Housing

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

Impact Discussion: The proposed treatments would occur on privately owned lots. Nevada County OES is required to comply with local plans, policies, and regulations (SPR AD-3). Treatments would be designed and take place in a manner that is consistent with applicable plans, policies, and regulations outlined in the Nevada County General Plan (County of Nevada 1995d), Nevada County Land Use and Development Code (County of Nevada 2024b), and the Nevada–Yuba–Placer Unit 2023 Strategic Fire Plan (CAL FIRE 2023). Additionally, the forthcoming Land Management Plan from Nevada County OES's Ready Nevada County will consist of a toolbox of regionally specific and technically vetted best practices for wildfire mitigation treatments that can be deployed at multiple scales. The Land Management Plan is a component of the Nevada County OES's Roadmap to Resilience, which is a County-wide effort to plan for all hazards. As discussed in Section 3.2, Agriculture and Forestry Resources, and Section 3.5, Biological Resources, treatment activities would be implemented in a manner consistent with local plans and regulations. Additionally, as discussed in Section 3.12, Noise, treatment activities would take place during daytime hours, consistent with the County Noise Ordinance.

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

Nevada County does not contain any coastline, and the project site is not within the Coastal Zone. Therefore, the project does not need to acquire a Coastal Development Permit under the California Coastal Act and SPR AD-9 does not apply to the proposed project.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact LU-2: Induce Substantial Unplanned Population Growth	Impact LU-2, pp. 3.12-14–3.12-15	N/A	LTS	Yes	N/A	LTS	☒

Impact Discussion: The potential for implementation of treatment projects to result in population growth was analyzed in the PEIR. The project would require 5- to 24-person crews to implement the proposed treatments. The project would require a short-term increase in demand for workers. However, it is anticipated that workers implementing the proposed treatment project would primarily consist of contractors. Additionally, CAL FIRE employees, local fire agencies, or Nevada County employees may also be included, and the project would not require the hiring of new permanent employees. Additionally, the number of workers required for the implementation of treatment activities is consistent with the crew sizes analyzed in the PEIR. Therefore, the resulting impact to population growth is the same and would not result in a substantially more significant impact than what was analyzed in the PEIR. No SPRs are applicable to this impact.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts related to Land Use and Planning, Population and Housing: Would the project result in other impacts related to land use and planning, and population and housing that are not	N/A	N/A	N/A	No	N/A	N/A	☒

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

Impact Discussion: The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in CalVTP PEIR, Section 3.12. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to land use in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not analyzed in the PEIR. No new impact related to land use would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AD-3: Consistency with Local Plans, Policies, and Ordinances. The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal	No	N/A	N/A

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.			

3.11 Noise

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact NOI-1: Result in a Substantial	Impact NOI-1, pp. 3.13-	SPR NOI-1 through SPR NOI-6	LTS	Yes	SPR NOI-1 through SPR NOI-6	LTS	☒

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	9–3.13-12; Appendix NOI-1	SPR AD-3			SPR AD-3		

Impact Discussion: The proposed treatments would require heavy noise-generating equipment. Nevada County identifies noise restrictions for construction activities, and these would also apply to the vegetation treatments. The Nevada County Code Section 12.04.070 prohibits the production of construction noise Monday through Sunday from 7:00 p.m. to 7:00 a.m. (County of Nevada 2024c). The proposed project site does not contain any schools or hospitals within 1,500 feet of treatment areas. However, there are multiple residential uses surrounding the project site, because it is proposed on private property in a residential community with approximately 400 homes in the general project area. In accordance with SPR NOI- 1 and Nevada County Code Section 12.04.070, project activities and the use of heavy equipment would be limited to daytime hours. Additionally, equipment would be properly maintained and equipped with mufflers (SPR NOI-2), engine shrouds would be kept closed during equipment operation (SPR NOI-3), equipment staging areas would be located away from sensitive land uses (SPR NOI-4), and idling of equipment would be restricted and equipment would be shut down when not in use (SPR NOI-5). Further, the project would notify noise-sensitive receptors within 1,500 feet of proposed project activities (SPR NOI-6). Noise associated with implementation of the project would be temporary, and SPRs AD-3 and NOI-1 through NOI-6 would be implemented to limit the potential impact on ambient noise levels. The impact would be less than significant, and the project would not result in a more significant impact than what was analyzed in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During	Impact NOI-2, pp. 3.13-12	SPR NOI-1	LTS	Yes	SPR NOI-1	LTS	☒

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

Impact Discussion: The project would require the use of large trucks to haul heavy equipment to the project site. The trucks would use SR-174 before reaching the project site. While trucks would pass residential sensitive receptors, it is not anticipated that project traffic would result in a substantial increase in truck-generated noise along these roads. Further, the project would use public roads for site access. The event of each truck passing could increase the single-event noise levels. Consistent with the Nevada County Noise Ordinance, SPR NOI-1 would be implemented and equipment hauling trips would be limited to daylight hours, limiting single-event noise level exposure during more noise-sensitive hours such as evening and nighttime. The impact would be less than significant, and the project would not result in a more significant impact than what was analyzed in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts Related to Noise: Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: The project is consistent with the CalVTP PEIR and the site-specific characteristics are within the regulatory and environmental setting in Section 3.13 of the PEIR. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to noise in the areas outside the CalVTP treatable landscape are essentially the same as those within the

treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not analyzed in the PEIR. No new impact related to noise would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR NOI-1: Limit Heavy Equipment Use to Daytime Hours. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR NOI-2: Equipment Maintenance. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR NOI-3: Engine Shroud Closure. The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR NOI-4: Locate Staging Areas Away from Noise-Sensitive Land Uses. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR NOI-5: Restrict Equipment Idle Time. The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR NOI-6: Notify Nearby Off-Site Noise-Sensitive Receptors. For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g.,	Yes	Nevada County OES Prior	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.			
SPR AD-3: Consistency with Local Plans, Policies, and Ordinances. The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES Prior-During	Nevada County OES

3.12 Recreation

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Impact Significance for the Treatment Project	No New Impact
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	Impact REC-1, pp. 3.14-6–3.14-7	SPR REC-1	LTS	No	N/A	LTS	☒

Impact Discussion: The proposed treatments would occur on private property. There is a historic park, Empire Mine State Historic Park, immediately adjacent to the proposed sites as identified in the Nevada County Recreation and Resilience Plan. This park is owned by the State of California, Department of Parks and Recreation (DPR 2008).

However, the project would only occur on private property and treatment activities would not restrict access or disrupt recreational activities; no road closures would occur that would affect access to Empire Mine State Historic Park.

As a result, the impact on recreation is within the scope of the PEIR. The project would not result in a more significant impact than covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Impact Significance for the Treatment Project	No New Impact
Other Impacts to Recreation: Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A		☒

Impact Discussion: The project is consistent with the CalVTP PEIR and the site-specific characteristics are within the regulatory and environmental setting in Section 3.14 of the PEIR. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to recreation in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, the impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to recreation would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR REC-1: Notify Recreational Users of Temporary Closures. This SPR applies to all treatment activities and treatment types.	No	N/A	N/A

3.13 Transportation

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact TRAN-1: Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures	Impact TRAN-1, pp. 3.15-9 –3.15-10	SPR TRAN-1 SPR AD-3	LTS	Yes	SPR TRAN-1 SPR AD-3	LTS	☒

Impact Discussion: The project would potentially temporarily increase vehicular traffic along roads leading to the project site and roads within the project site. Roads leading to the project site are SR-174, Rattlesnake Road, Dog Bar Road, Clydesdale Road, and Rolphholm Road. Roads within the project site where treatment would occur are Rattlesnake Road, Lower Colfax Road, Highland Drive, Sunshine Valley Road, Orzalli Road, Mattson Lane, Octagon Lane, Emily Court, Honey Hollow Road, Justice Court, Old Coach Way, Mt. Olive Road, Rolphholm Road, Dog Bar Road, Oak Meadows Road, Oak Ridge Drive, Rambling Road, Casa Loma Drive, Westhome Road, Killarney Lane, High Barbaree, View Forever Lane, Tall Timbers Lane, Tiger Lily Lane, Brooks Road, Koala Lane, Chinook Lane, Rattlesnake Ridge Drive, Highland Drive, Ward Court, Green Lane, and Bradford Drive. Public roads and private roads would be primarily used for site access, and treatment activities would take place adjacent to roads, ranging from approximately 75 feet to 150 feet on either side of the road. The potential project-related increase in traffic would be associated with vehicles hauling heavy equipment and materials, and with personnel commuting to the project site. Work crews would range from 12 to 24 people. The impact to traffic would be short term and would consist of a limited number of additional vehicles. No prolonged road closures would result from the project. Further, the treatments would not occur all at once but rather in phases. Therefore, the increase in traffic would be dispersed over the project timeline. As previously discussed, SPR AD-3 is applicable to the project and treatments would be consistent with local policies such as the Nevada County General Plan Circulation Element and Nevada County Code. SPR TRAN-1 would be implemented, the project proponent would refer to the California Department of Transportation (Caltrans) and Nevada County to determine whether a Traffic Management Plan is needed, and all

appropriate permits would be obtained. As a result, the impact to traffic would be within the scope of the PEIR. The project would not result in a more significant impact than covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, pp. 3.15-10–3.15-11	SPR TRAN-1 SPR AD-3	LTS	Yes	SPR TRAN-1 SPR AD-3 SPR AQ-3	LTS	☒

Impact Discussion: The project would utilize existing roads to access the project site. There are no new roads proposed, nor is re-design or alteration of current roadways proposed. Prescribed pile burning is proposed as part of the project, which would create the potential for smoke production to affect visibility along nearby roadways. Burning would take place under favorable conditions and a Burn Plan (SPR AQ-3) would be created prior to minimize smoke production and visibility. During each burn event, the project proponent would monitor the prescribed burn and the associated smoke. SPRs TRAN-1 and AD-3 would be implemented to manage and minimize the potential hazards associated from smoke generated during prescribed burns. As a result, the impact to increased hazards is also the same as and within the scope of the PEIR. The project would result in a less than significant impact related to increasing road hazards and would not result in a more significant impact than covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact TRAN-3: Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, pp. 3.15-11–3.15-13	MM AQ-1	PSU	Yes	N/A	LTS	☒

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

	PEIR Specific			Project Specific			
Impact Threshold	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts to Transportation: Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: The project is consistent with the CalVTP PEIR, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.14 of the PEIR. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to transportation in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to transportation would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR TRAN-1: Implement Traffic Control during Treatments. Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques. Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.	No	N/A	N/A
SPR AD-3: Consistency with Local Plans, Policies, and Ordinances. The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES Prior-During	Nevada County OES

3.14 Public Services, Utilities, and Service Systems

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	Impact UTL-1, 3.16	N/A	LTS	Yes	N/A	LTS	☒

Impact Discussion: Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance. . Treatment activities would require an on-site water supply for fire suppression in the event a burn goes out of the prescribed area as well as for dust control. Water would be provided by truck at the time of any prescribed burning activities as well as for mixing of herbicides. As discussed in Section 3.11, Land Use and Planning, Population, and Housing, implementation of the project would not include development or induce significant population growth in the area that would increase the demand for water or require additional infrastructure. No SPRs are applicable to this impact. The project would not result in a substantially more significant impact than that covered in the PEIR, and the impact would be less than significant.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	SPR UTIL-1	PSU	Yes	N/A	LTS	☒

Impact Discussion: The vegetation treatments on the project site would generate biomass as a result of vegetation removal. Biomass would be managed by mastication, chipping and spreading on site to a depth of no more than 6 inches, or burning on site using air curtain burners or pile burning. In some cases, cut vegetation may be stored on site temporarily prior to pile burning under favorable conditions. The potential for biomass to result in solid waste in excess of state standards or local infrastructure capacity was examined in the PEIR, which found a potentially significant and unavoidable impact, because it cannot be guaranteed that all localities across the state would develop the capacities to process excess solid organic waste produced from treatment activities within the timeframes of the proposed activities. The project would not require disposal at a processing facility or landfill; waste would be disposed of on site. Therefore, the project would not produce biomass quantities in exceedance of state standards or local capacities, and alternate disposal techniques would be used (mastication, chipping, or burning). As such, impacts would be less than significant and the project would not result in a substantially more significant impact than that covered in the PEIR.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	Impact UTL-3, 3.16	SPR UTIL-1	LTS	Yes	N/A	LTS	☒

Impact Discussion: As previously discussed, the project would generate biomass as a result of vegetation removal, which would be managed by mastication, chipping or burning on site using air curtain burners, or pile burning. The PEIR examined this issue and determined that because projects under the CalVTP would divert solid organic waste generated from treatment activities from solid waste facilities to biomass power plant, wood product processing facility, and/or composting for processing, the amount of waste transported to solid waste facilities would be decreased, consistent with AB 939 and SB 1383 and that impacts from projects implemented under the Cal VTP would be less than significant. Further, the project would not require off-site disposal. Therefore, the project would result in no impact related to compliance with federal, state, and local management and reduction goals, statutes, and regulations related to solid waste. The inclusion of areas outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions related to public services, utilities, and service systems in the areas outside the CalVTP treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts are the same and, for the reasons described above, impacts of the proposed project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact would occur.

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

Impact Discussion: The proposed project is consistent with the CalVTP, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.16 of the PEIR. The impacts associated with the proposed project were also determined to be consistent with the PEIR and would not result in a more significant impact.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR UTIL-1: Solid Organic Waste Disposition Plan. This SPR applies only to mechanical and manual treatment activities and all treatment types.	No	N/A	N/A

3.15 Wildfire

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

Impact Discussion: The primary goal of the project is to reduce on-site fuels and reduce wildfire risk through the implementation of shaded fuel breaks. The proposed vegetation treatments could result in a temporary increase in fire risk. The use of prescribed pile burning, heavy machinery, and mechanized hand tools on the project site could result in increased fire risk, such as a prescribed fire escaping control lines or an accidental ignition occurring. The potential increase in exposure to wildfire from implementation of treatment activities was examined in the PEIR. The project would include prescribed burning. For prescribed pile burning, the burn piles would be limited in size and burning would occur when conditions are favorable for burning. The manual treatments on the project site would include the use of handheld equipment (e.g., chainsaws) to cut vegetation. The project proponent would require mechanized hand tools to have state-approved spark arrestors to reduce accidental ignition per SPR HAZ-2. SPR HAZ- 3 would be implemented for manual treatments as well, which requires each tree-cutting crew to carry one fire extinguisher per chainsaw and each vehicle to carry one long-handled shovel and either an axe or a Pulaski, per PRC Section 4458, to quickly respond to an ignition if one occurs. The project would also utilize heavy machinery to implement vegetation treatments; this machinery would be required to be equipped with state-approved spark arrestors. The project proponent would also prohibit smoking in vegetated areas, per SPR HAZ-4; designated smoking areas would be barren or cleared to mineral soil with a minimum 3-foot diameter to reduce the possibility of accidental fire ignition. Additionally, the RPF prepared a Fire Policy for Operations (included as Appendix G), which mandates certain equipment to be deployed, procedures to be followed, and preventive measures to be taken by the treatment contractor and would further reduce the likelihood of fire ignition. Therefore, the project would not result in a substantially more significant impact than that covered in the PEIR, and the impact would be less than significant.

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

Impact Discussion: Phase 1 of the proposed project would include manual and mechanical treatments. Chemical and prescribed (pile) burning may occur at a later date during treatment maintenance. . Steep slopes are present on the project site, and the removal of vegetation and prescribed burning could result in slope instability. The project would occur on private parcels, with an estimated 400 homes on project parcels and additional structures in surrounding communities. Residents of these areas could be exposed to post-fire flooding or landslides. However, the U.S. Landslide Inventory (USGS 2024) indicates the project site is not in an area with a history of landslides (USGS 2024). The project would minimize erosion by prohibiting the use of heavy equipment on slopes greater than 65% (SPR GEO-7), and slopes greater than 50% would be inspected by an RFP or licensed geologist (PG or CEG) prior to implementing treatments (SPR GEO-8). Prescribed pile burning would require preparation of a Burn Plan and would be conducted such that soil burn would be minimized (SPR AQ-3). Fuel break treatments would increase horizontal and vertical spacing between understory vegetation. Further, proposed project treatments would not result in complete vegetation removal, which would help to maintain stability of the soil. Steep slopes are present on the project site, but SPRs GEO-3, GEO-4, GEO-5, GEO-7, and GEO-8 would be implemented to minimize issues related to slope instability.

The proposed project would not expose people or structures to substantial risks from post–prescribed pile burning landslides or flooding. Consistent with the PEIR, impacts would be less than significant, and the proposed project would not result in a substantially more significant impact.

Impact Threshold	PEIR Specific			Project Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed?	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Other Impacts Related to Wildfire: Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	☒

Impact Discussion: The project is consistent with the CalVTP, and the site-specific characteristics are within the regulatory and environmental setting in Section 3.17 of the PEIR. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project site, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Therefore, as described above, potential impacts related to wildfire risk and post-fire slope instability are also the same. The impacts associated with the proposed project were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the proposed project would not result in impacts to wildfire that were not addressed in the PEIR.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AQ-3: Create Burn Plan. The project proponent will create a Burn Plan using the CAL FIRE Burn Plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES Prior	Nevada County OES
SPR GEO-3: Stabilize Disturbed Soil Areas. The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with	Yes	Nevada County OES During-Post	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. This SPR only applies to mechanical and prescribed herbivory treatment activities and all treatment types.			
SPR GEO-4: Erosion Monitoring. The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. This SPR applies only to mechanical and prescribed burning treatment activities and all treatment types.	Yes	Nevada County OES During-Post	Nevada County OES
SPR GEO-5: Drain Stormwater via Water Breaks. The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	Yes	Nevada County OES During	Nevada County OES
SPR GEO-7: Minimize Erosion, Slope Restrictions for Heavy Equipment and Tractor Roads. This SPR applies to all treatment activities and all treatment types.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR GEO-8: Steep Slopes. The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES
SPR HAZ-2: Require Spark Arrestors. This SPR applies only to manual treatment activities and all treatment types	Yes	Nevada County OES, local fire agency staff, contractor crews During	Nevada County OES
SPR HAZ-3: Require Fire Extinguishers. The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe	Yes	Nevada County OES, local fire agency staff, contractor crews During	Nevada County OES

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types.			
SPR HAZ-4: Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	Yes	Nevada County OES, local fire agency staff, CAL FIRE crews During	Nevada County OES

3.16 Administrative Standard Project Requirements

SPRs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AD-1: Project Proponent Coordination. For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources on site; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the Burn Plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES
SPR AD-2: Delineate Protected Resources. The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AD-3: Consistency with Local Plans, Policies, and Ordinances. The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project	Yes	Nevada County OES Prior-During	Nevada County OES

SPRs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
SPR AD-4: Public Notifications for Prescribed Burning. At least three days prior to the commencement of prescribed burning operations, the project proponent will: (1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; (2) publish a public interest notification in a local newspaper or other widely distributed media source describing the activity, timing, and contact information; (3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES Prior	Nevada County OES
SPR AD-5: Maintain Site Cleanliness. If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES During-Post	Nevada County OES
SPR AD-6: Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	Yes	Nevada County OES Prior	Nevada County OES

SPRs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AD-7: Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. Information on 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.	Yes	Nevada County OES Prior-During-Post	Nevada County OES
SPR AD-8: Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Yes	Nevada County OES Prior-During	Nevada County OES
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal	No	N/A	N/A

SPRs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.			

3.17 Mandatory Findings of Significance

Impact Threshold	New Impact that is Significant or Potentially Significant	New Impact that is Less Than Significant with Mitigation Incorporated	New Impact that is Less Than Significant Impact	No New Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or	☐	☐	☐	☒

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

3.18 Discussion

No additional comments.

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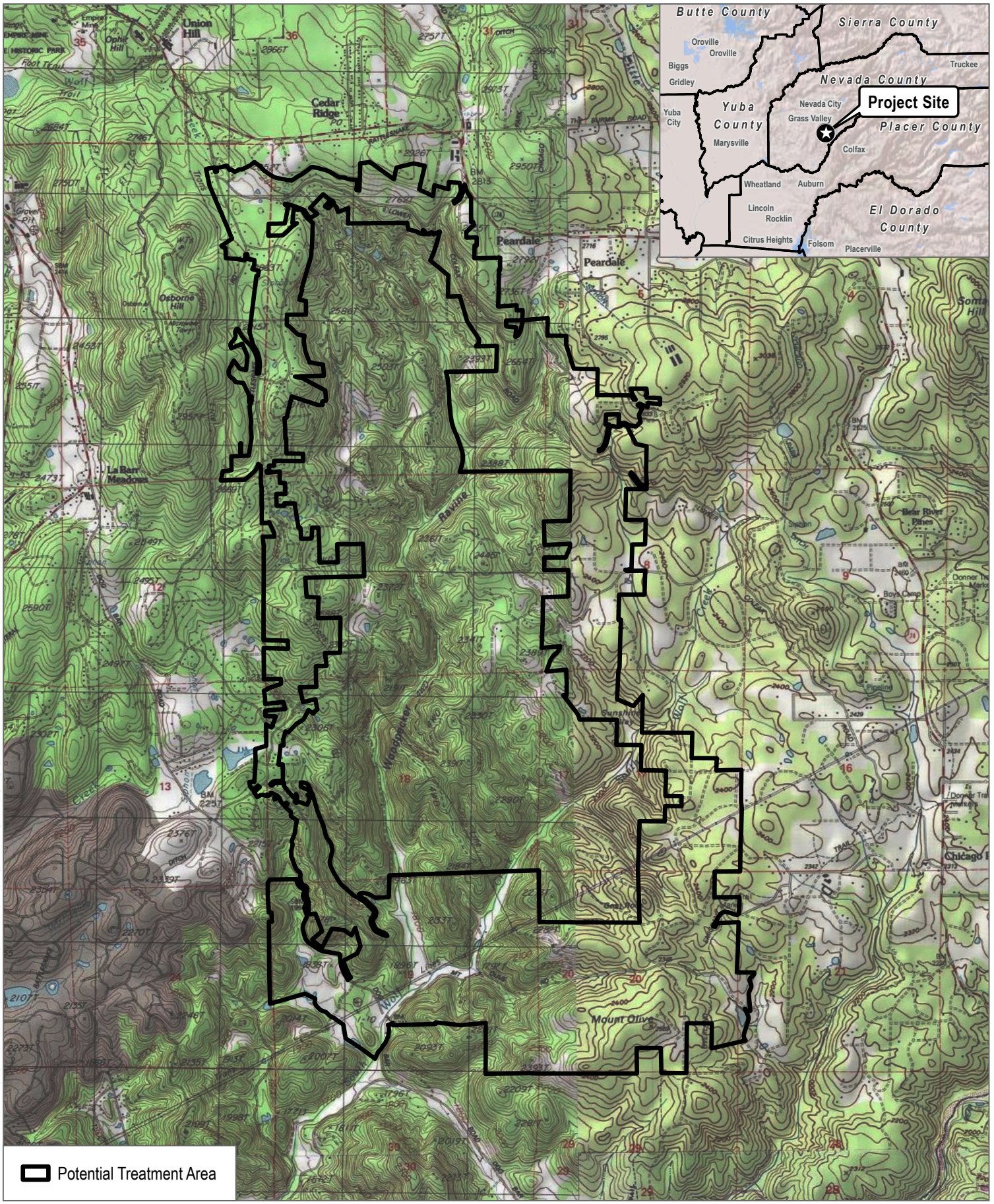
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SOURCE: USGS Topo 7.5-Minute Series Grass Valley and Chicago Park Quadrangles

DUDEK

0 1,500 3,000 Feet

FIGURE 1

Project Location

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

FIGURE 2

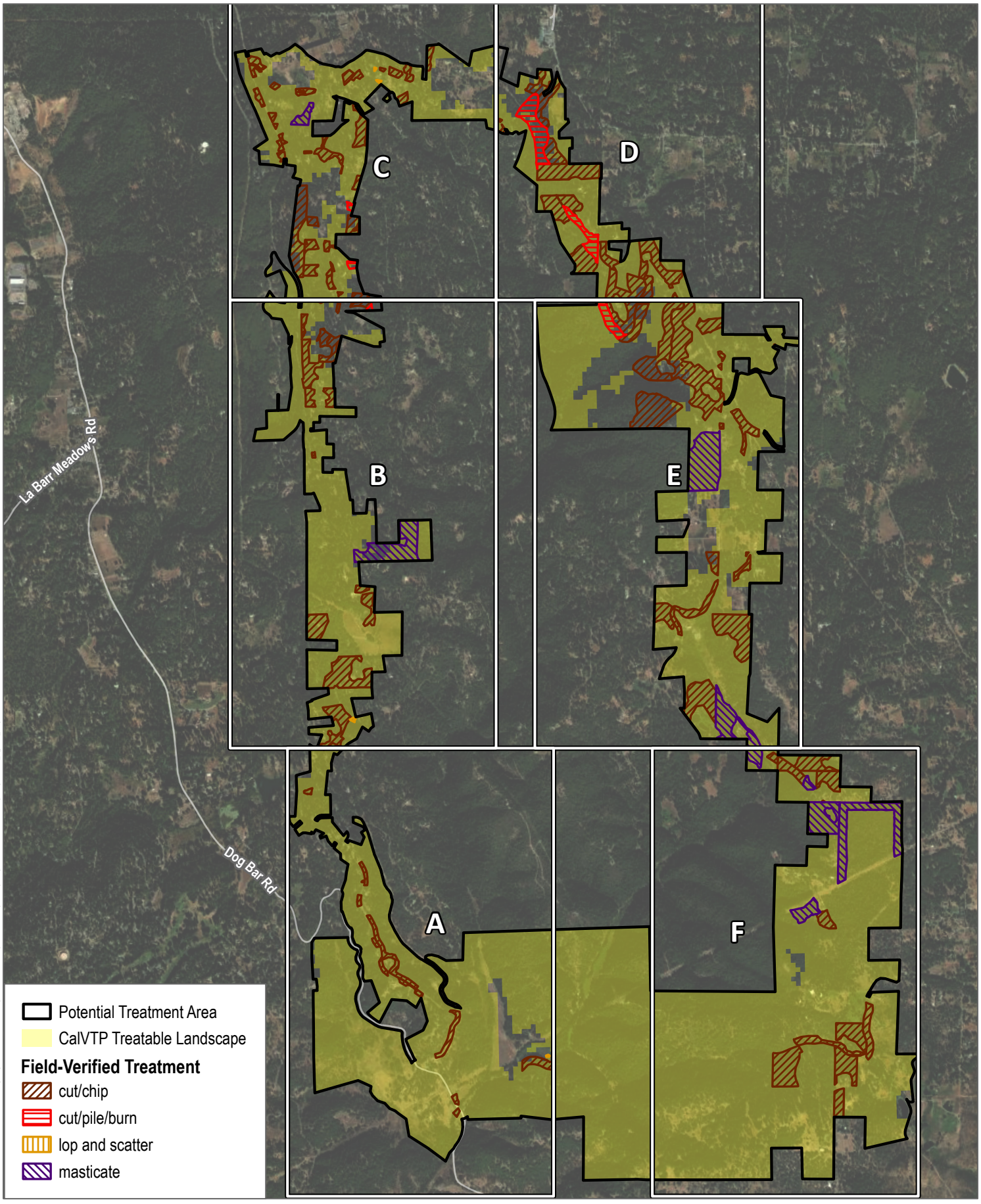
Project Site

Woodpecker Ravine Shaded Fuel Break Phase I

DUDEK

0 1,250 2,500 Feet

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SOURCE: Maxar 9/23/2023

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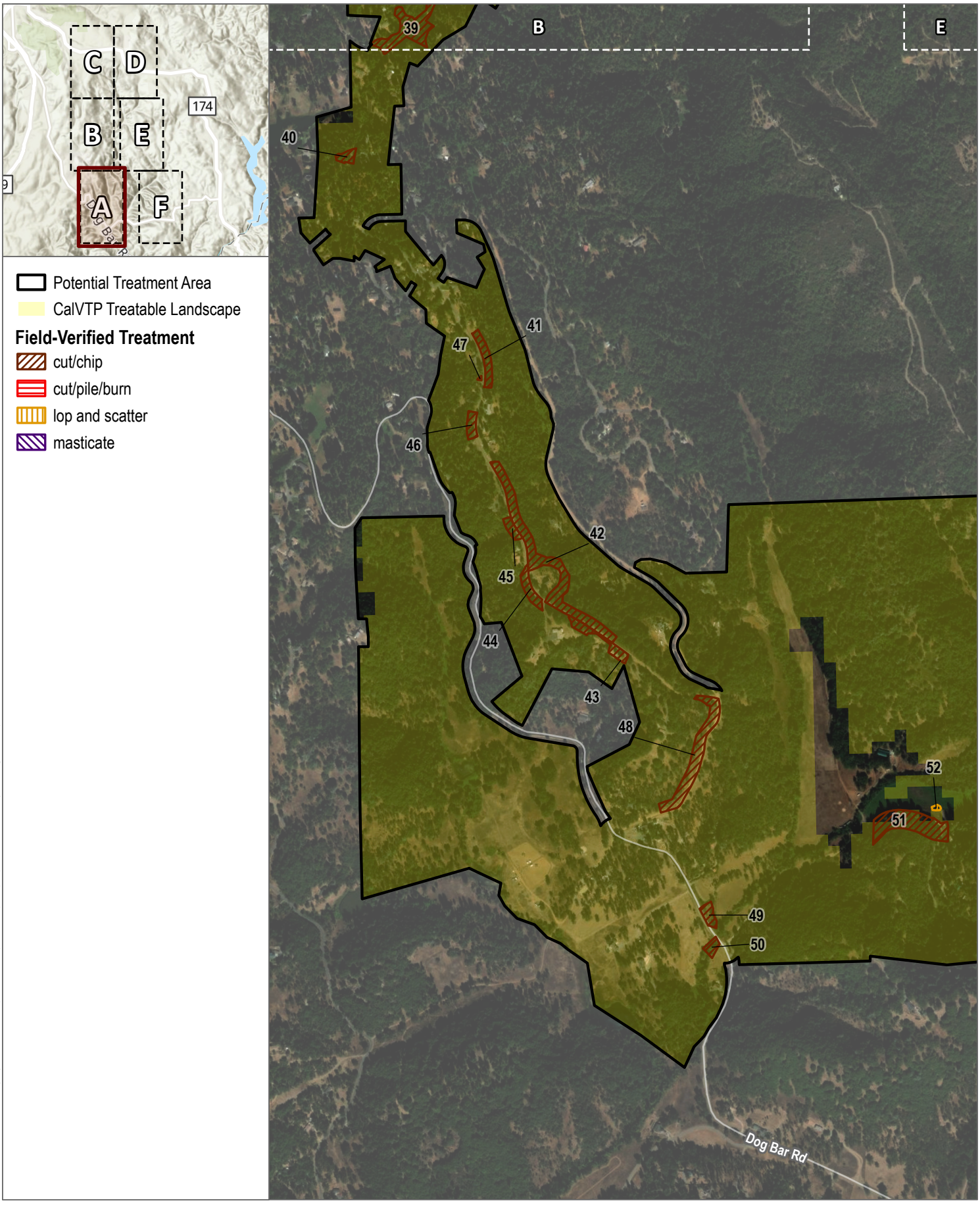
0 1,250 2,500 Feet

FIGURE 3

Proposed Treatments Index Map

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

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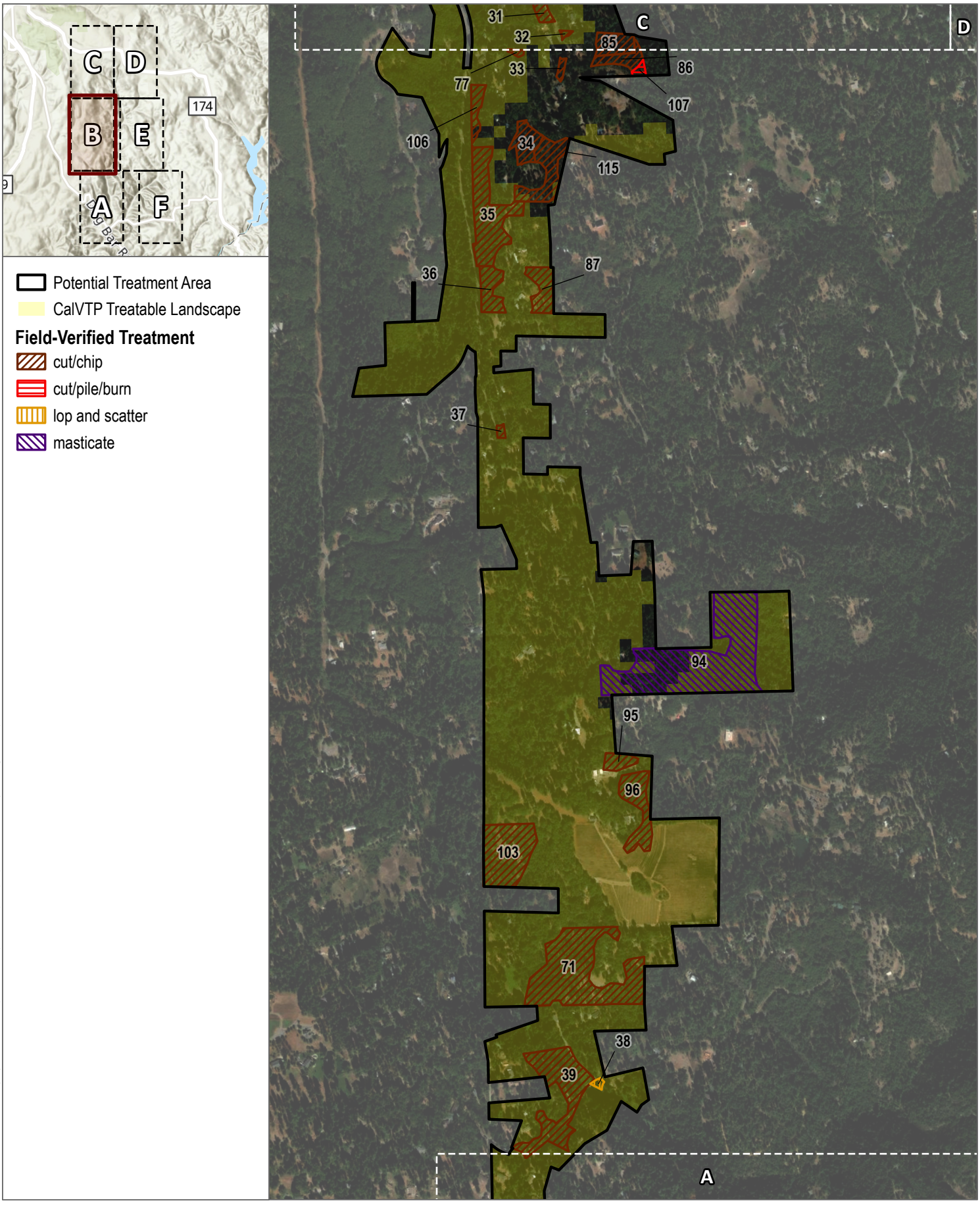
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FIGURE 3A

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

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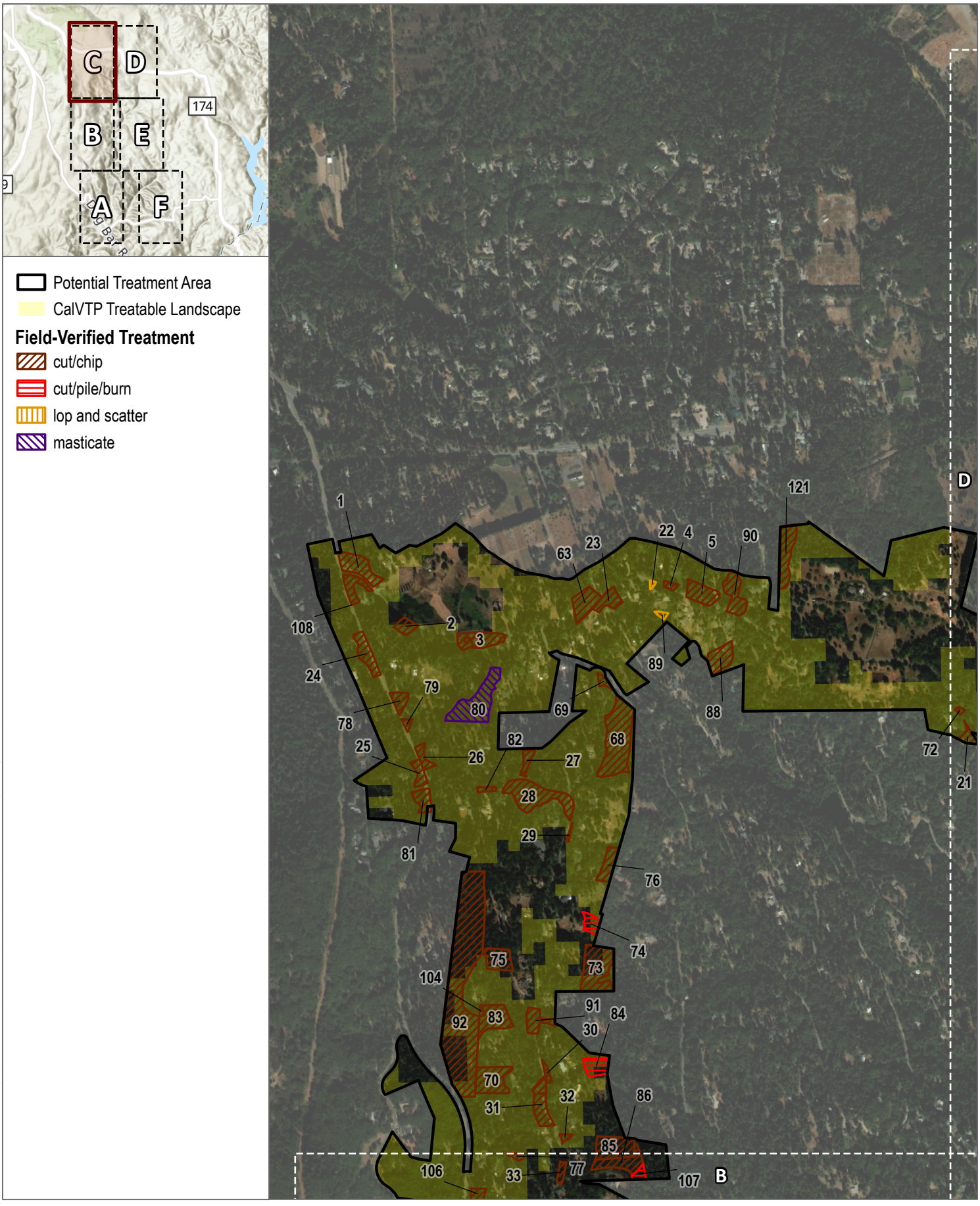
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FIGURE 3B

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

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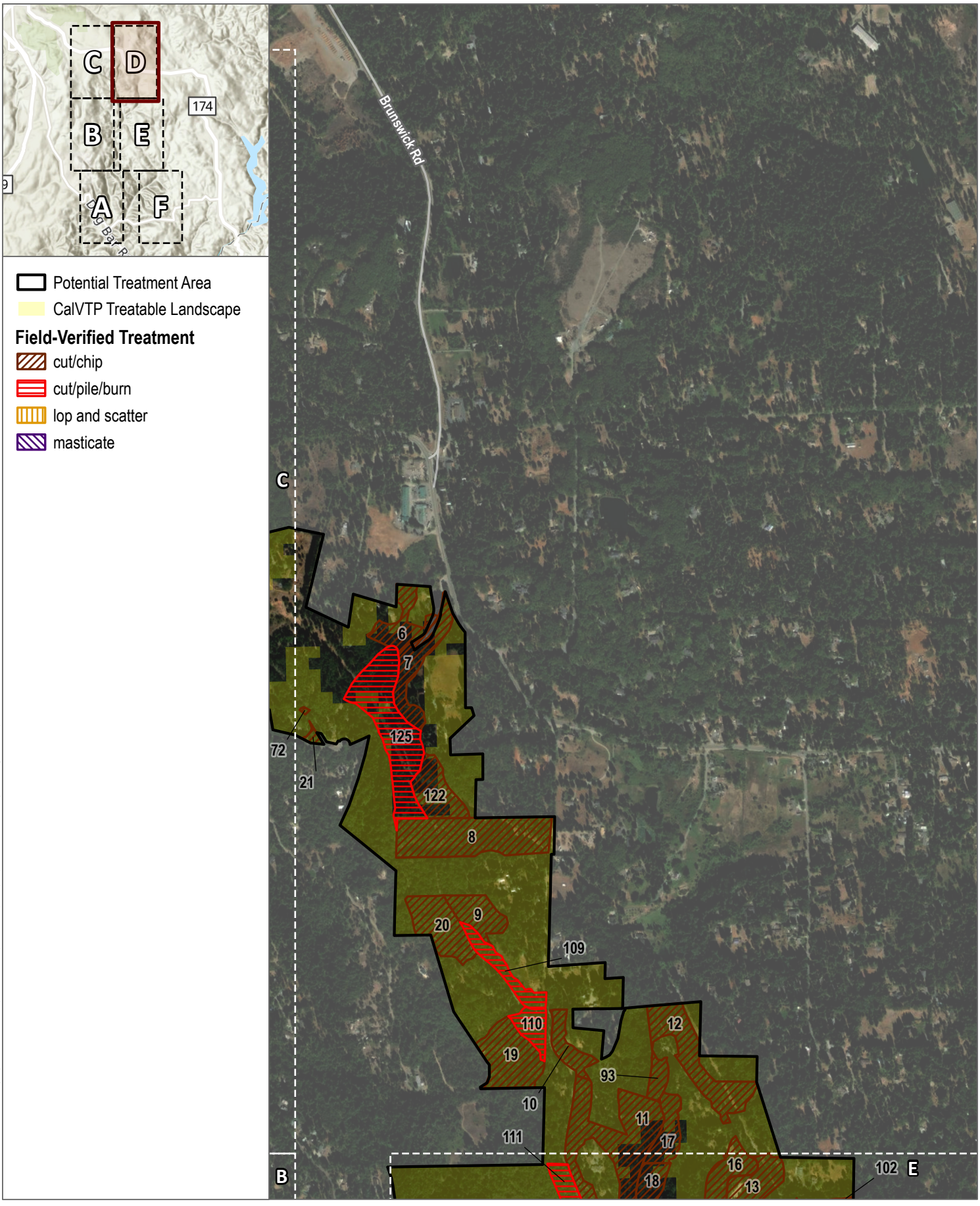
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FIGURE 3C

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

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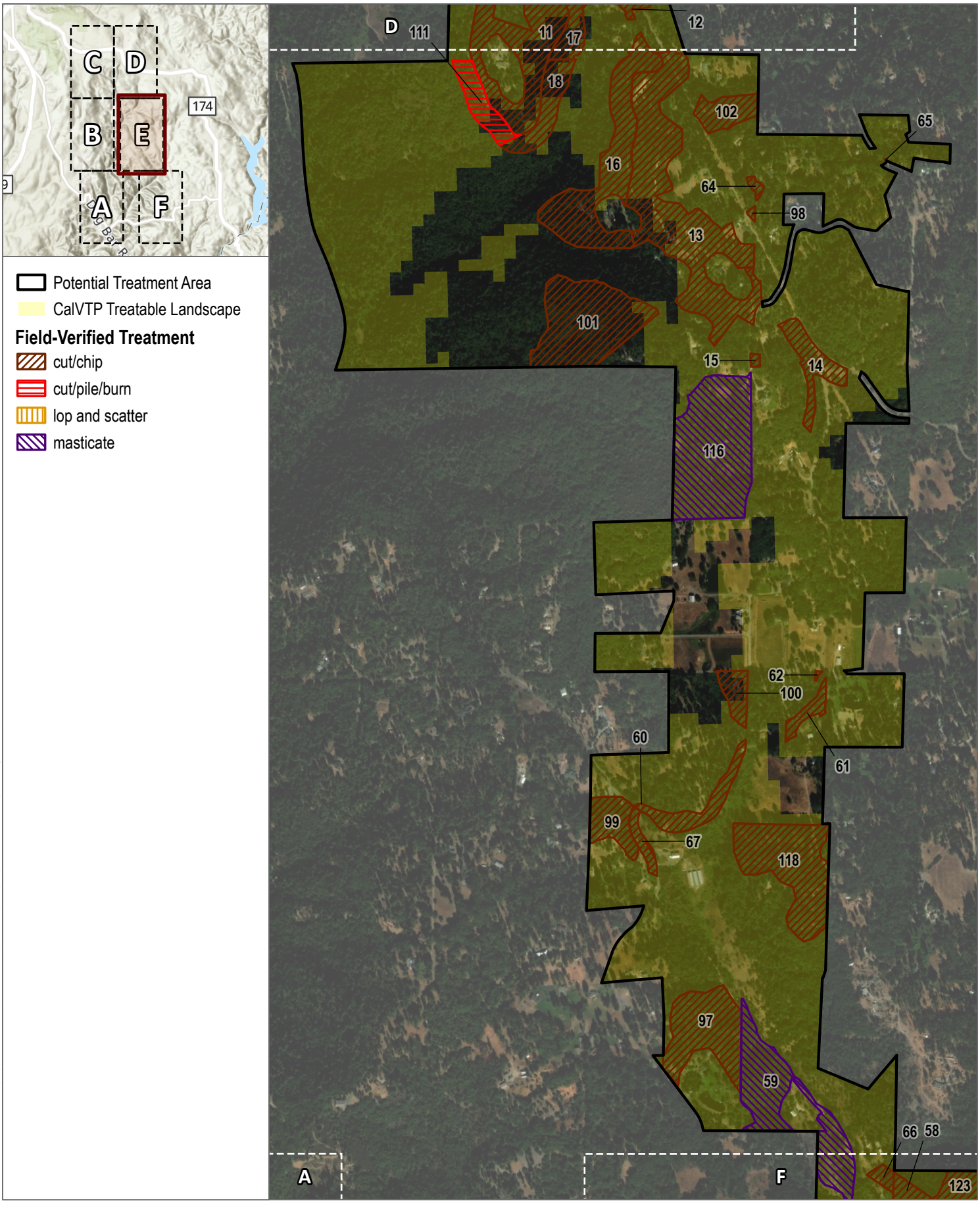
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FIGURE 3D

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

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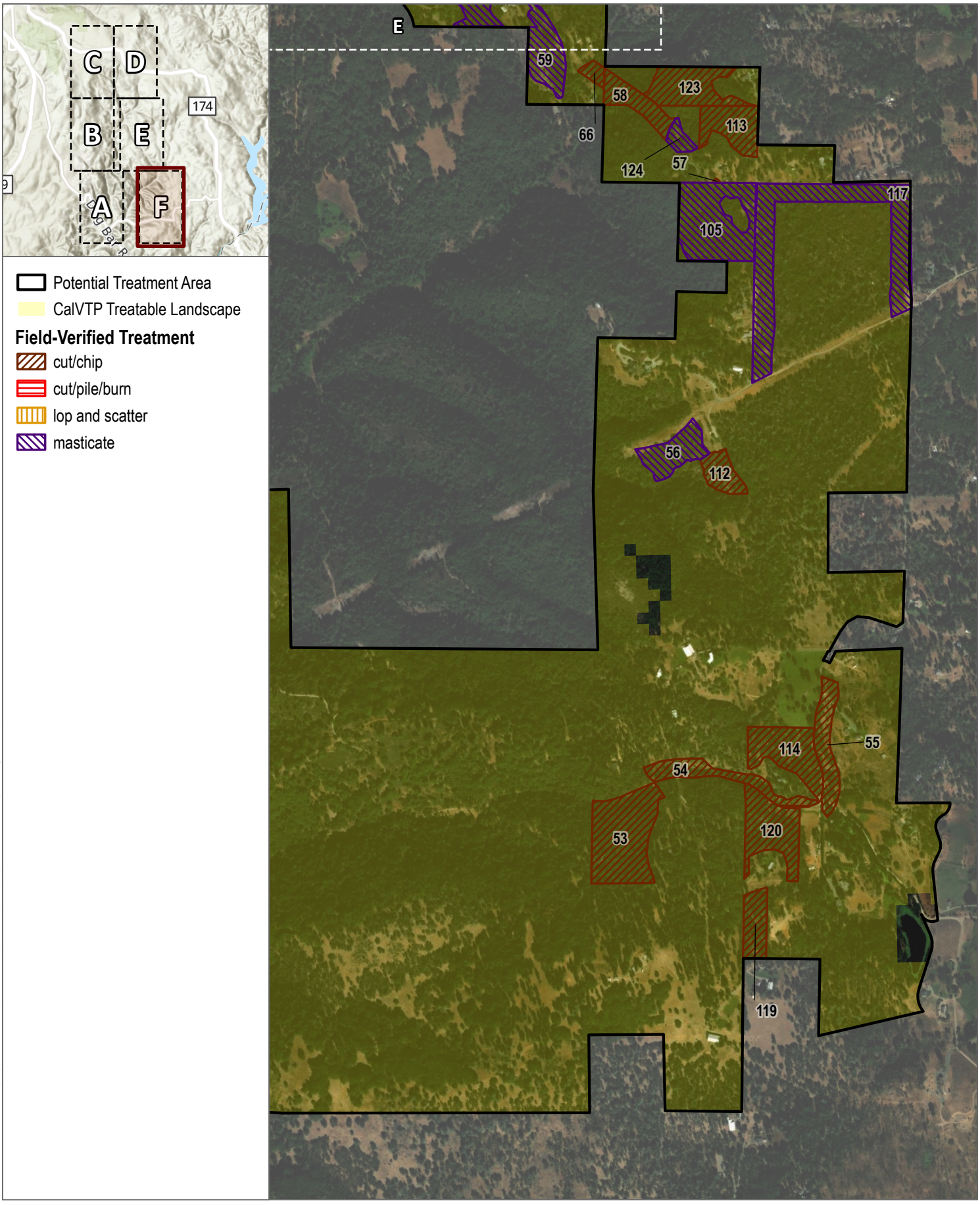
0 500 1,000 Feet

FIGURE 3E

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

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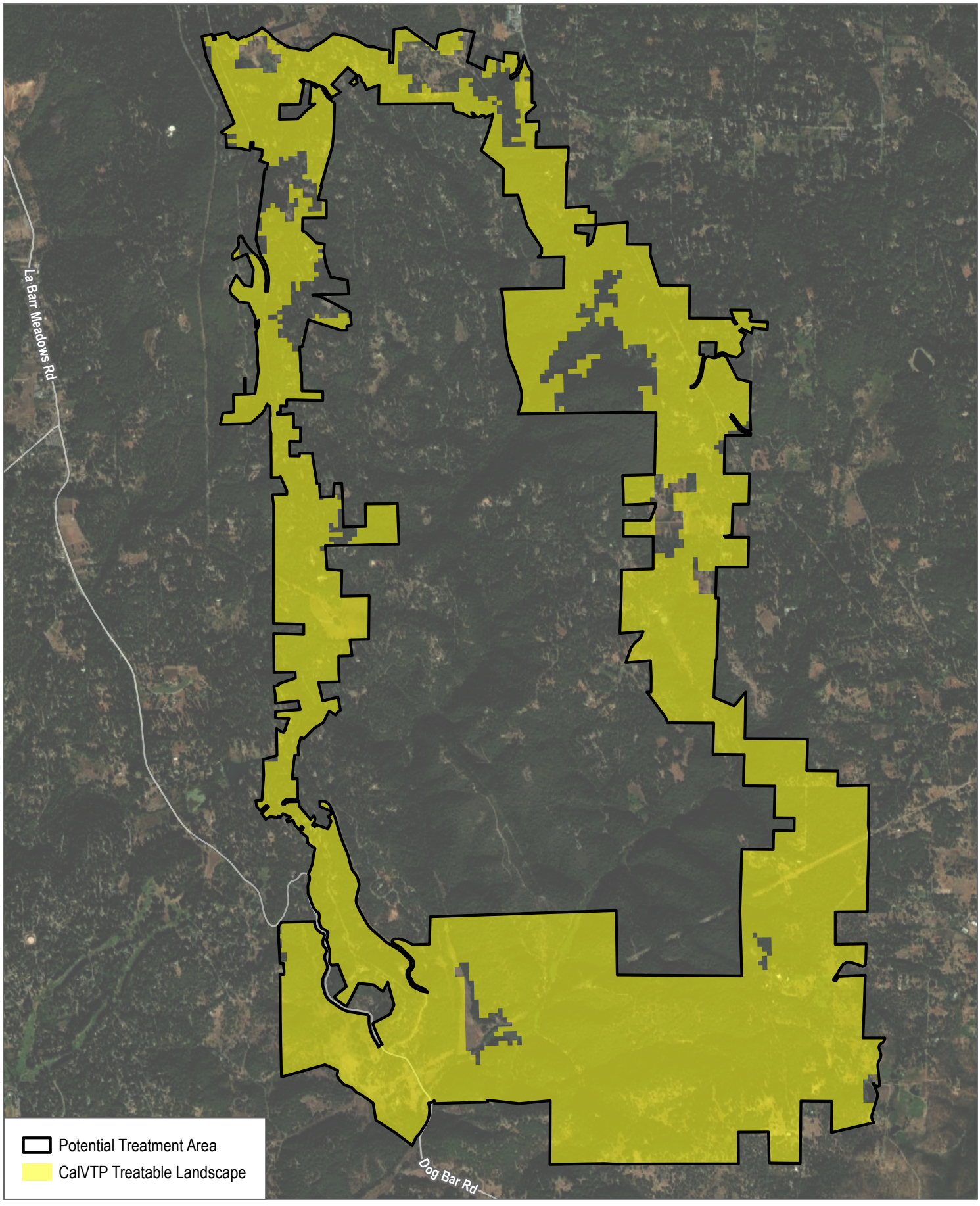
0 500 1,000 Feet

FIGURE 3F

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

DUDEK

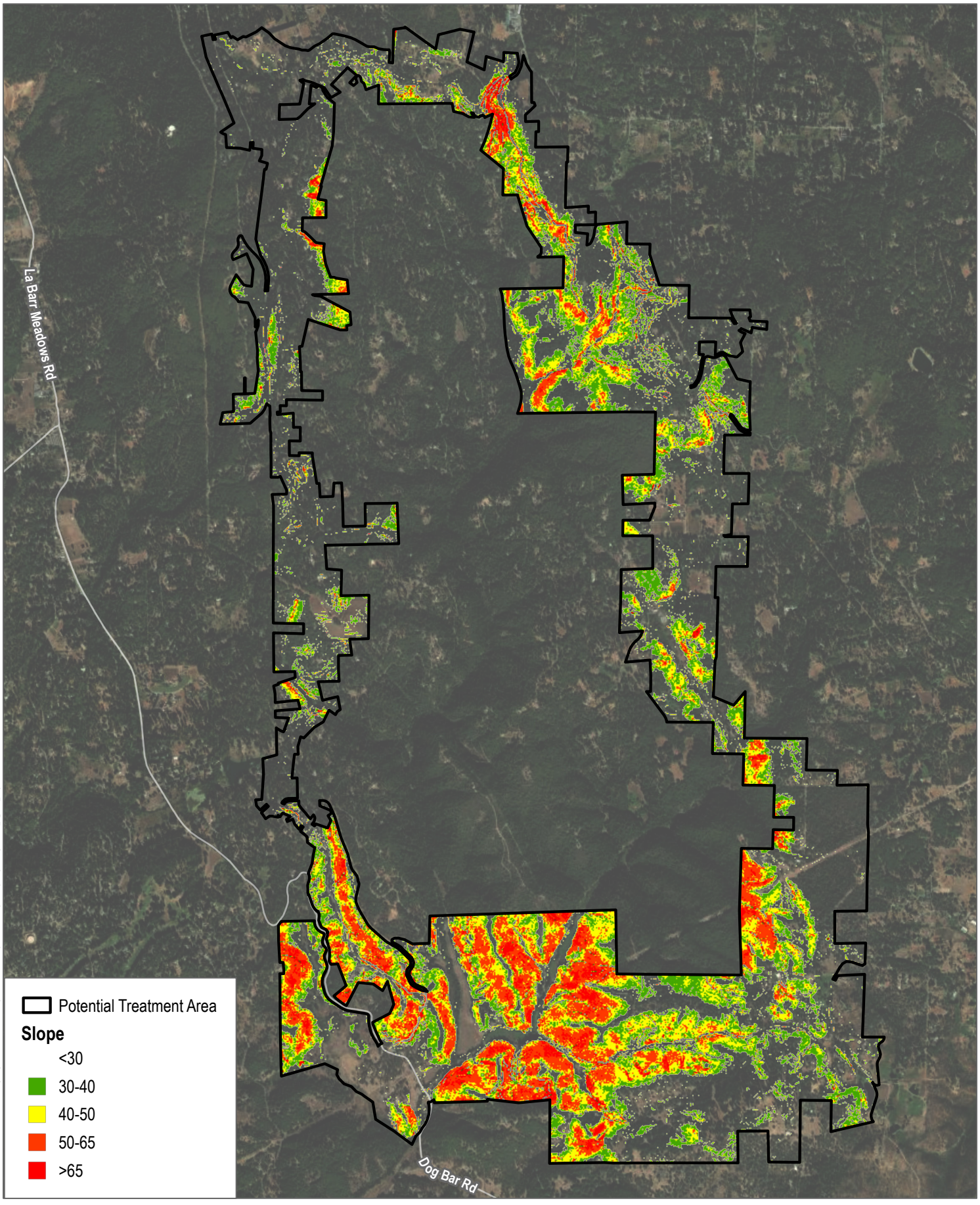
0 1,250 2,500 Feet

FIGURE 4

CalVTP Treatable Landscape

Woodpecker Ravine Shaded Fuel Break Phase I

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 9/23/2023

DUDEK

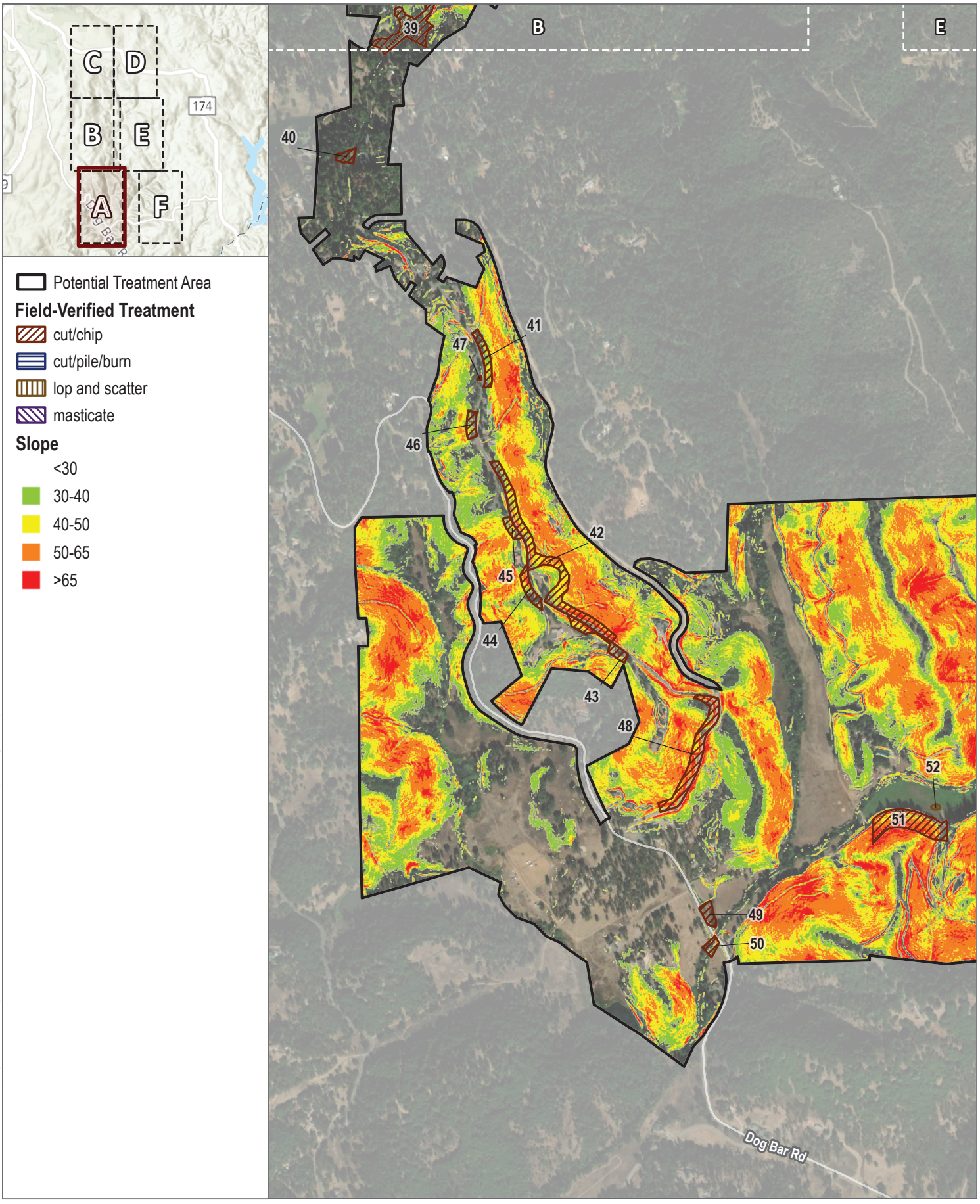
0 1,250 2,500 Feet

FIGURE 5

Slopes

Woodpecker Ravine Shaded Fuel Break Phase I

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 9/23/2023

DUDEK

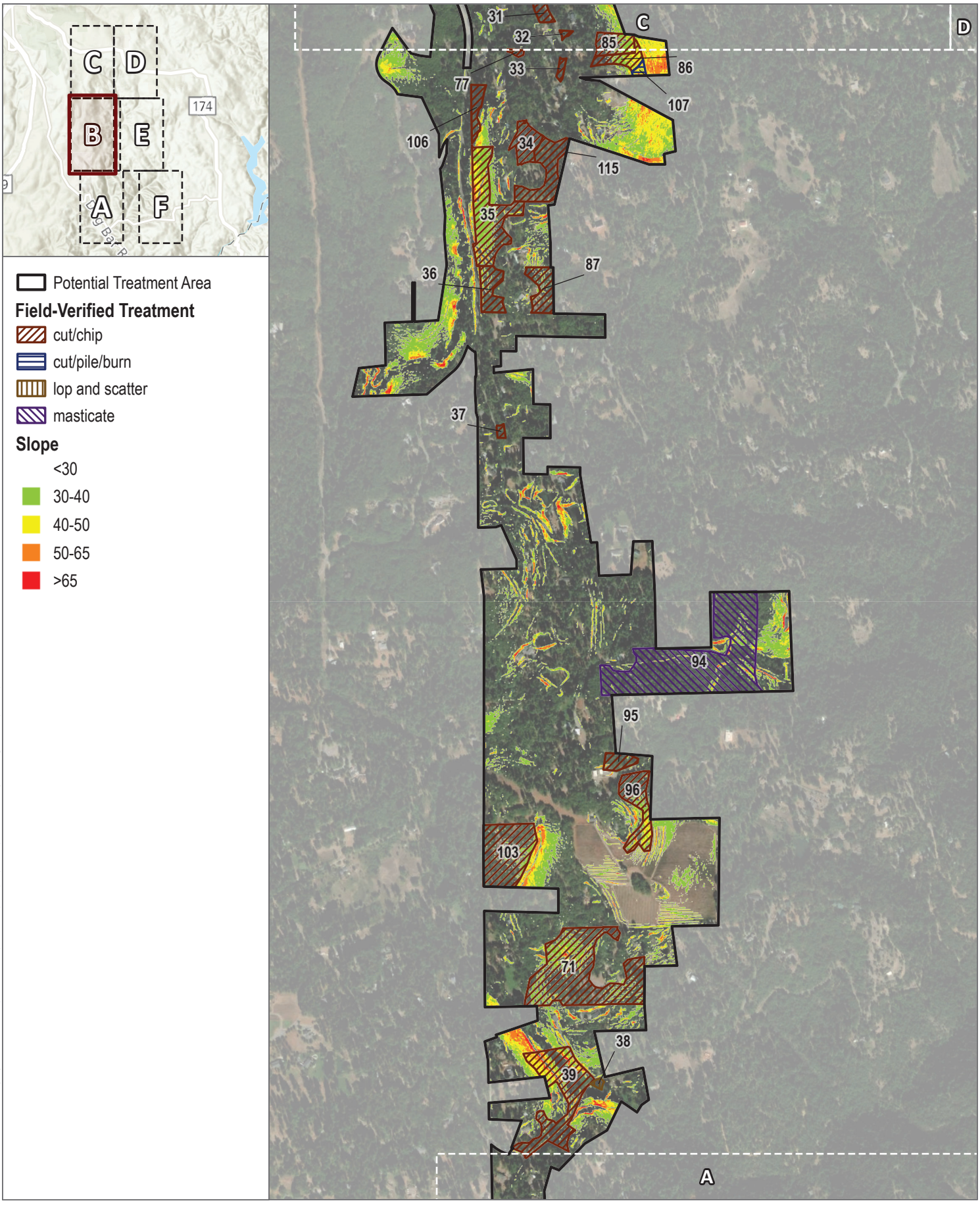
0 500 1,000 Feet

FIGURE 5A

Slope and Proposed Treatments

Woodpecker Ravine Shaded Fuel Break Phase I

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 9/23/2023

DUDEK

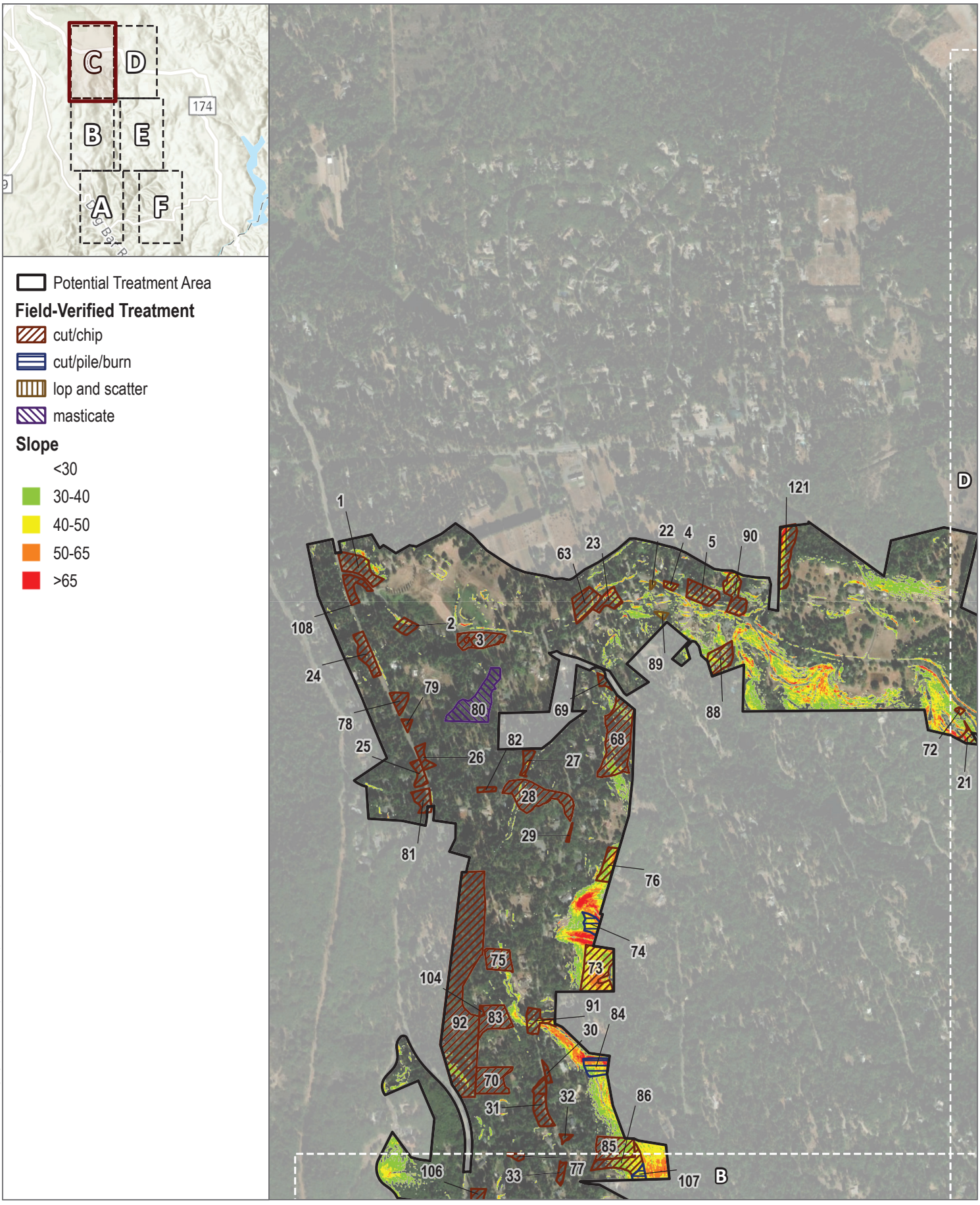
0 500 1,000 Feet

FIGURE 5B

Slope and Proposed Treatments

Woodpecker Ravine Shaded Fuel Break Phase I

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 9/23/2023

DUDEK

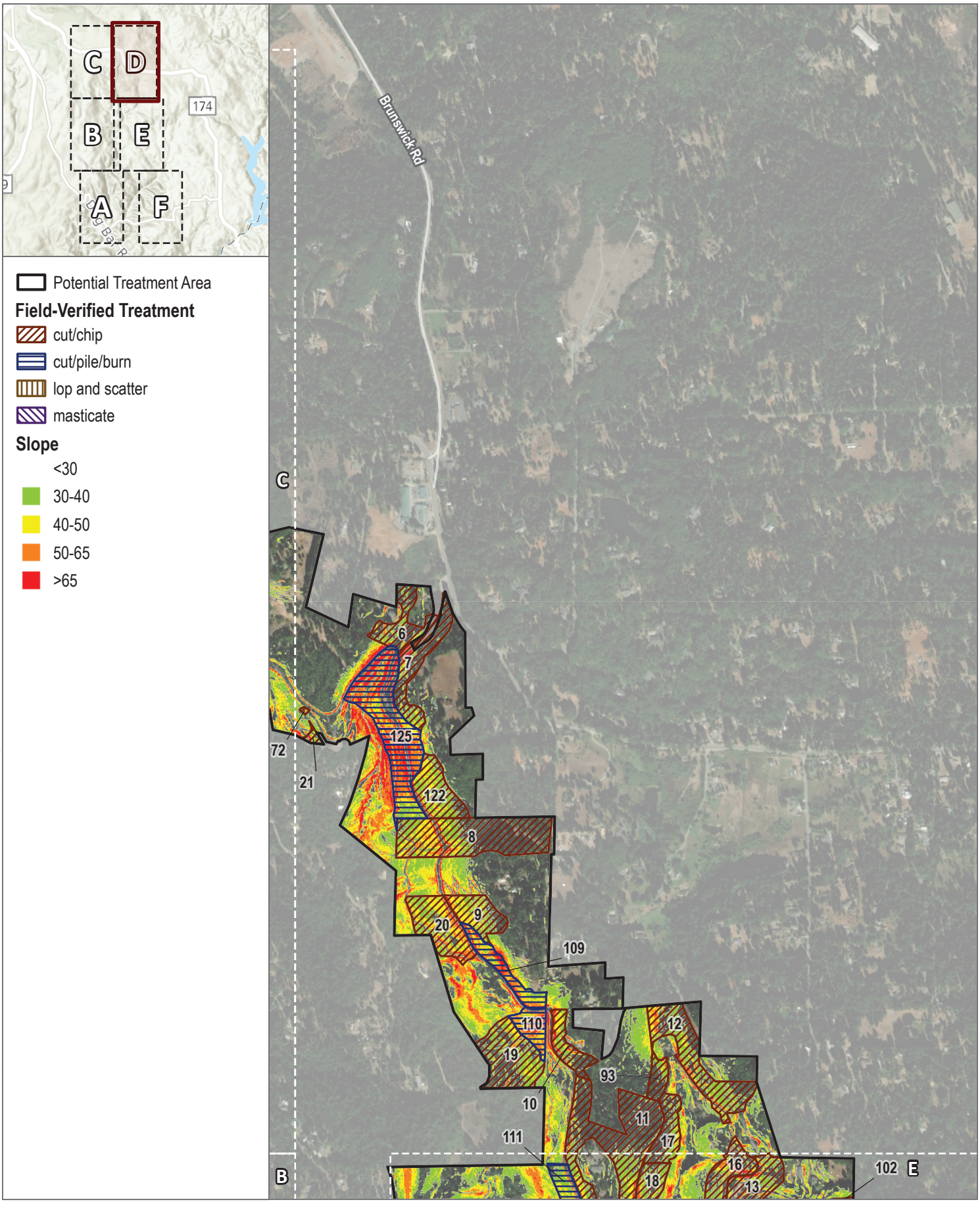
0 500 1,000 Feet

FIGURE 5C

Slope and Proposed Treatments

Woodpecker Ravine Shaded Fuel Break Phase I

INTENTIONALLY LEFT BLANK



SOURCE: Maxar 9/23/2023

DUDEK

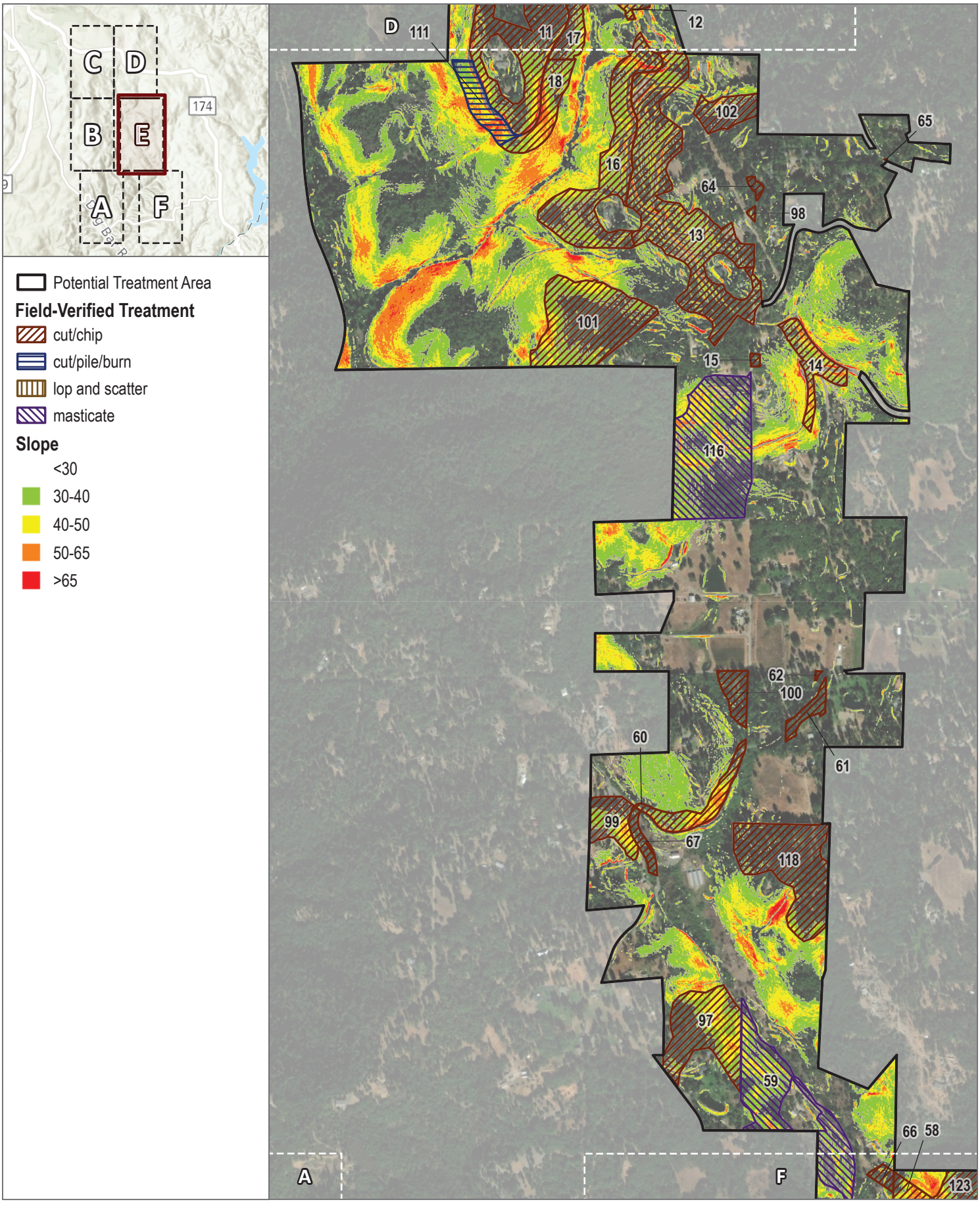
0 500 1,000 Feet

FIGURE 5D

Slope and Proposed Treatments

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

DUDEK

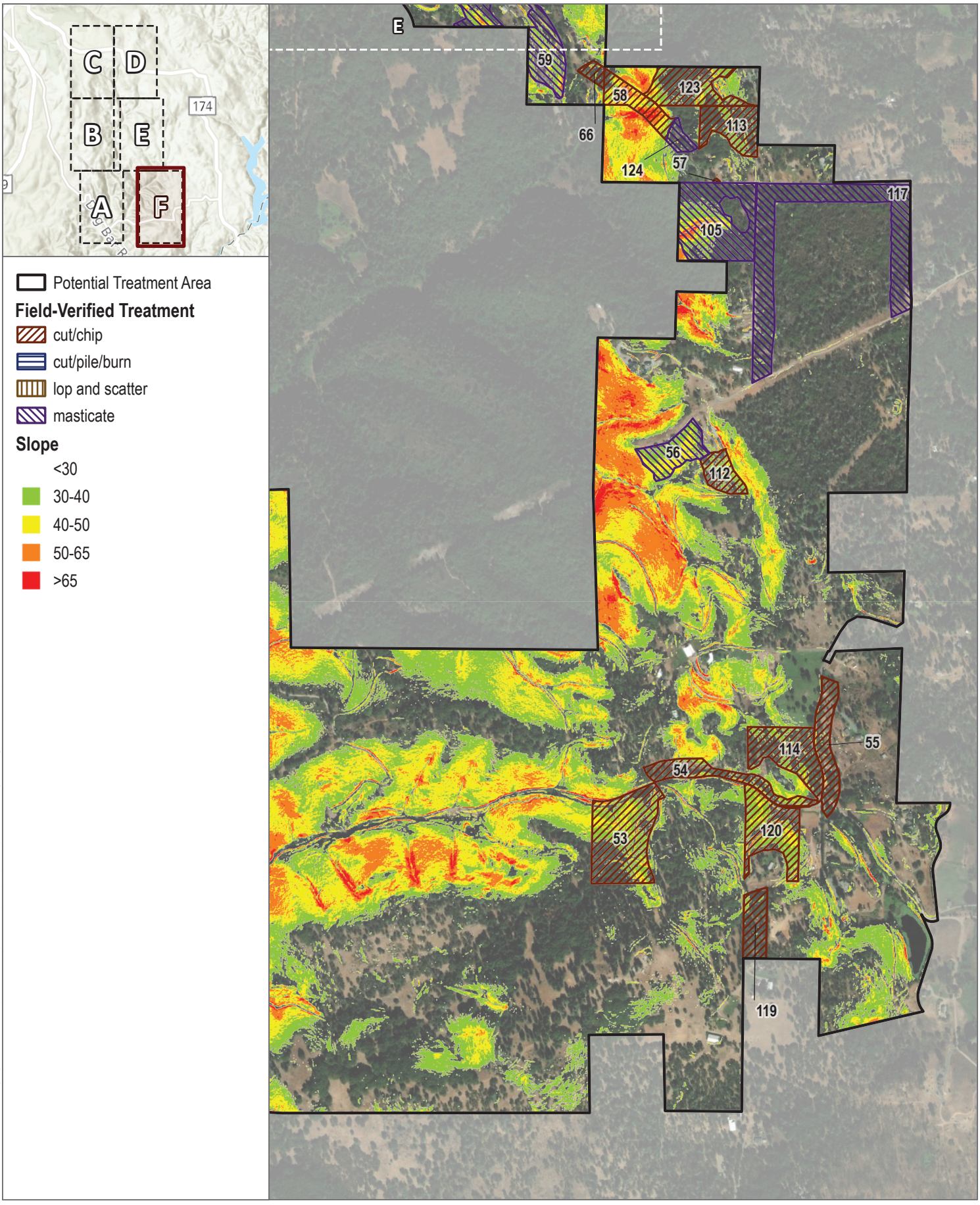
0 500 1,000 Feet

FIGURE 5E

Slope and Proposed Treatments

Woodpecker Ravine Shaded Fuel Break Phase I

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SOURCE: Maxar 9/23/2023

DUDEK

0 500 1,000 Feet

FIGURE 5F

Slope and Proposed Treatments

Woodpecker Ravine Shaded Fuel Break Phase I

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Appendix A

Standard Project Requirements and Mitigation Measures Checklist

1. Standard Project Requirements and Mitigation Measures Checklist

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

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

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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Administrative Standard Project Requirements					
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	**All**
SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
SPR AD-4 Public Notifications for Prescribed Burning: At least days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Prior Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	Nevada County OES
SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During-Post	Nevada County OES	Nevada County OES	
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	All

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.					
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. Information on proposed projects (PSA in progress): ▪ GIS data that include project location (as a point); ▪ project size (typically acres); ▪ treatment types and activities; and ▪ contact information for a representative of the project proponent. The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website). 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);	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During-Post**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ 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.					
SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.					
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Administrative Standard Project Requirements					
SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All
SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All
SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment :Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All
Air Quality Standard Project Requirements					
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality	Initial Treatment: Y	Prior-During	Nevada County OES	Nevada County OES	All

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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.	Treatment Maintenance: Y				
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air 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	Nevada County OES	Nevada County OES	All
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	All

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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700. ▪ This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A
SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	During	Nevada County OES	Nevada County OES	All

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements					
SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES /Dudek**	**Nevada County OES**	
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following: ▪ A written description of the treatment location and boundaries. ▪ Brief narrative of the treatment objectives. ▪ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages. ▪ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. ▪ A request for information regarding potential impacts to cultural resources from the proposed treatment. ▪ A detailed description of the depth of excavation, if ground disturbance is expected. In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	
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	Initial Treatment: Y	During	Nevada County OES	Nevada County OES	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Treatment Maintenance: Y				
SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	N/A	
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in	Initial Treatment: Y	Prior-During	Nevada County OES	Nevada County OES	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Treatment Maintenance: Y				
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES	Nevada County OES	
Biological Resources Standard Project Requirements					
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:					
1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided**. If, based on the data review and reconnaissance-level survey, the qualified RPF or	**Initial Treatment: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist. 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	**Treatment Maintenance: Y**				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	

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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities. ▪ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. ▪ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
stream shading may inform the tree size retention requirements. ▪ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service). ▪ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. ▪ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints. ▪ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry. ▪ The project proponent will notify CDFW 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					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW. This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed). During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will: ▪ Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale. ▪ The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance. Additional measures will be applied to ecological restoration treatment types: ▪ For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types. ▪ Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved. ▪ A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology. ▪ If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity. These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance. A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.					
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats,	**Initial Treatment: Y**	**During**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle): ▪ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ▪ include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training; ▪ minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; ▪ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; ▪ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and ▪ follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Treatment Maintenance: Y**				
Special-Status Plants					
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant	**Initial Treatment: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances: ▪ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.	**Treatment Maintenance: Y**				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ 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					
SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts: ▪ The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA.	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the vegetation types present in the ESHA. ▪ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs. ▪ Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.					
Invasive Plants and Wildlife					
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▪ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;	**Initial Treatment: Y** **Treatment Maintenance: Y**	During	Nevada County OES	Nevada County OES	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▪ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; ▪ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▪ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and ▪ implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version). This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
Wildlife					
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species (and nursery sites (e.g., bat maternity roosts) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design will meet the following standards: ▪ 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: N** **Treatment Maintenance: N**	N/A	N/A	N/A	
SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common	**Initial Treatment: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey	**Treatment Maintenance: Y**				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food). If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following: ▪ **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. ▪ **Modify Treatment.** The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ **Defer Treatment.** The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests:					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ **Monitor Active Raptor Nest During Treatment**. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases. ▪ **Retention of Raptor Nest Trees**. Trees with visible raptor nests, whether occupied or not, will be retained. This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
Geology, Soils, and Mineral Resource Standard Project Requirements					
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
herbicide treatment activities and all treatment types, including treatment maintenance.					
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During - Post**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.					
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During - Post**	**Nevada County OES**	**Nevada County OES**	**All**
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity. (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. Prohibit prescribed herbivory treatments on slopes in excess of 70% (i.e., 35	Initial Treatment: N Treatment Maintenance: N	Prior - During	Nevada County OES	Nevada County OES	All

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
degrees) and avoid established trails on slopes over 50% (i.e., 27 degrees) This SPR applies to all treatment activities and all treatment types, including treatment maintenance.					
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	**All**
Greenhouse Gas Emissions Standard Project Requirements					
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: N** **Treatment Maintenance: N**	**N/A**	**N/A**	**N/A**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Hazardous Material and Public Health and Safety Standard Project Requirements					
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior-During	Nevada County OES, local fire agency staff, contactor crews	Nevada County OES	All
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES, local fire agency staff, contactor crews	Nevada County OES	All
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES, local fire agency staff, contactor crews	Nevada County OES	All
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES, local fire agency staff, CAL FIRE crews	Nevada County OES	All
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to	Initial Treatment: Y	Prior-During	Nevada County OES	Nevada County OES	All

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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.					
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: ▪ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▪ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▪ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▪ spray nozzles will be kept within 24 inches of vegetation during spraying.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.					
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**
Hydrology and Water Quality Standard Project Requirements					
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: The project proponent 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.	**Initial Treatment: N** **Treatment Maintenance: N**	**N/A**	**N/A**	**N/A**	**N/A**

<table>
<tr><th>Standard Project Requirements</th><th>Applicable? (Y/N)</th><th>Timing</th><th>Implementing Entity</th><th>Verifying/ Monitoring Entity</th><th>Project Site Applicable</th></tr>
<tr><td>

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.
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.
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<tr><td>
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ’s are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths
<table>
<tr><th>Water Class</th><th>Class I</th><th>Class II</th><th>Class III</th><th>Class IV</th></tr>
<tr><td>Water Class Characteristics or Key Indicator Beneficial Use</td><td>1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to</td><td>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</td><td>No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.</td><td>Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.</td></tr>
</table>
</td><td>Initial Treatment: Y

Treatment Maintenance: Y</td><td>Prior</td><td>Nevada County OES</td><td>Nevada County OES</td><td>All</td></tr>
</table>

Standard Project Requirements					Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
	sustain fish migration and spawning.	to Class I waters.							
WLPZ Width (ft)– Distance from top of bank to the edge of WLPZ									
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.						
30-50 % Slope	100	75							
>50 % Slope	150	100							

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

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry. ▪ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas. ▪ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. ▪ Burn piles will be located outside of WLPZs. ▪ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. ▪ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers. ▪ Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.					

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes. ▪ Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water. This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicides: ▪ Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. ▪ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. ▪ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. ▪ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ▪ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▪ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.					
SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing	**Initial Treatment: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Treatment Maintenance: Y**				
Noise Standard Project Requirements					
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity		Verifying/ Monitoring Entity	Project Site Applicable
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All	
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All	
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All	
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	During	Nevada County OES	Nevada County OES	All	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity		Verifying/ Monitoring Entity	Project Site Applicable
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Prior	Nevada County OES	Nevada County OES	All	
Recreation Standard Project Requirements						
SPR REC-1 Notify Recreational Users of Temporary Closures. If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent to will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: N Treatment Maintenance: N	N/A	N/A	N/A		
Transportation Standard Project Requirements						
SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction	Initial Treatment: Y	Prior-During		Nevada County OES	All	

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity		Verifying/ Monitoring Entity	Project Site Applicable
over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance. Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will	**Treatment Maintenance: Y**		**Nevada County OES**			

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

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Aesthetics and Visual Resources					
Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks The project proponent will conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation. If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent will, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent will thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to help screen public views and minimize the contrast between the fuel break and surrounding vegetation.	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	
Air Quality					
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques	**Initial Treatment: Y**	**During**	**Nevada County OES**	**Nevada County OES**	**All**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: ▪ Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. ▪ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: - meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; - be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; - contain no fatty acids or functionalized fatty acid esters; and	**Treatment Maintenance: Y**				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
- have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▪ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▪ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. ▪ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.					
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 or archaeologically trained resources professional, such as those with a CAL FIRE Cultural Resource Survey Certification, will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically	**Initial Treatment: Y** **Treatment Maintenance: Y**	**During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.					
Biological Resources					
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	**N/A**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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 the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.					
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ 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					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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 implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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, 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 first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead: ▪ 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	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ 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). 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.					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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 the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.					
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
(conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. Avoid Mortality, Injury, or Disturbance of Individuals The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. - For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c. - Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.					
Maintain Habitat Function ▪ The project proponent will design treatment activities to maintain the habitat function, by implementing the following:					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
- While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. - If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained. - A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
habitat function for the special-status species, the project proponent 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), the project proponent will avoid or minimize adverse effects to the species by implementing the following. Avoid Mortality, Injury, or Disturbance of Individuals ▪ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: - For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). ▪ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. ▪ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
technical information regarding appropriate limited operating periods. Maintain Habitat Function ▪ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: - While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. - If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. ▪ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
may consult with CDFW and/or USFWS for technical information regarding habitat function. A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
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 the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment. 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). The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 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: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
parties responsible for the long-term management of the land, and the legal and funding mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 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: ▪ The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. ▪ For species listed under ESA or CESA or a California Fully Protected Species, the project proponent will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment. ▪ For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible: ▪ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. ▪ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▪ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area).	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September). **CESA and ESA Listed Species.** A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c. **Other Special-status Species.** A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
(or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.					
Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: ▪ Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. ▪ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1. ▪ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). ▪ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break). ▪ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). ▪ Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory. The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.					
Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions: ▪ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: - restoring sensitive natural community or oak woodland functions and acreage within the treatment area; - restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
- preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ▪ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.					
Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following: ▪ Compensate for unavoidable losses of riparian habitat acreage and function by: - restoring riparian habitat functions and acreage within the treatment area; - restoring degraded riparian habitat outside of the treatment area; - purchasing riparian habitat credits at a CDFW-approved mitigation bank; or - preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. ▪ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or	**Initial Treatment: N** **Treatment Maintenance: N**	N/A	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity. 2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.					
Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands Impacts to wetlands will be avoided using the following measures:	**Initial Treatment: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. ▪ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).	**Treatment Maintenance: Y**				
▪ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. ▪ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▪ Within this buffer, herbicide application is prohibited.					

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ 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	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior-During**	**Nevada County OES**	**Nevada County OES**	

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ **Establish Avoidance Buffers.** The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.					
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;	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior - During**	**Nevada County OES**	**Nevada County OES**	**All**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
▪ burn when fuels have a higher fuel moisture content; ▪ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ▪ schedule burns before new fuels appear. As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.					
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	**Initial Treatment: Y** **Treatment Maintenance: Y**	**Prior**	**Nevada County OES**	**Nevada County OES**	**All**

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity	Project Site Applicable
of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.					

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Appendix B

Project-Specific CEQA Findings and Statement of Overriding Considerations

Introduction

The Nevada County Office of Emergency Services, referred to herein as "Project Proponent," in the exercise of its independent judgment, makes and adopts the following findings regarding its decision to approve the Woodpecker Ravine Shaded Fuel Break Phase 1 Project, referred to herein as "project," within the scope of the California Vegetation Treatment Program (CalVTP). This document has been prepared in accordance with the California Environmental Quality Act (Pub. Resources Code, Sections 21000 et seq.) (CEQA) and the CEQA Guidelines (Cal. Code Regs., Tit. 14, Sections 15000 et seq.).

Statutory Requirements for Findings

Public Resources Code section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]” The same section provides that the procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.” (Pub. Resources Code, Section 21002).

Section 21002 goes on to provide that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.”

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

(1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

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

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a Statement of

Overriding Considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, Sections 15093, 15043, subd. (b); see also Pub. Resources Code, Section 21081, subd. (b).) The California Board of Forestry and Fire Protection (the Board), adopted Findings and a Statement of Overriding Considerations on December 30, 2019.

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

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

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

Background and Project Description

See Section 2 of the PSA.

Environmental Review Process

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

On June 28, 2024, the Project Proponent received confirmation from CAL FIRE that the required information had been received regarding this project when it began preparing the PSA. The submittal included:

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

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

- The completed PSA Environmental Checklist;
- The completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);
- GIS data that include:
  - a polygon(s) of the project area, showing the extent of each treatment type included in the project (prescribed herbivory)

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

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

Record of Proceedings

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

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

Pursuant to CEQA Guidelines section 15091, subdivision (e), the documents constituting the record of proceedings are available for review during normal business hours at the Nevada County Office of Emergency Services 950 Maidu Avenue. Nevada City, CA 95959 . The custodian of these documents is Alex Keeble-Toll.

Mitigation Monitoring and Reporting Program

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

Findings for Determinations of No Impact or Less than Significant Impact

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

The Project Proponent concurs with the conclusions in the Final PEIR and treatment project PSA that all of the following impacts will be less than significant or no impact:

Aesthetics and Visual Resources

- Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities
- Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types
- 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

Agricultural and Forestry Resources

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

Air Quality

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

Archaeological, Historical, and Tribal Cultural Resources

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

Biological Resources

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

Geology, Soils, and Mineral Resources

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

Greenhouse Gas Emissions

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

Energy Resources

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

Hazardous Materials, Public Health and Safety

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

Hydrology and Water Quality

- Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning

- Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities
- Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory
- Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides
- Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area

Land Use and Planning, Population and Housing

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

Noise

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

Recreation

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

Transportation

- Impact TRAN-1: Result in Temporary Traffic Operations Impacts by Conflicting with a Program, Plan, Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures
- Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures
- Impact TRAN-3: Result in a new increase in VMT for the proposed CalVTP

Public Services, Utilities, ad Service Systems

- Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs
- Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity
- Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste

Wildfire

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

Cumulative

- Agriculture and Forestry Resources
- Biological Resources
- Geology, Soils, Paleontology, and Mineral Resources
- Energy Resources
- Hazardous Materials, Public Health and Safety
- Hydrology and Water Quality
- Land Use and Planning, Population, and Housing
- Noise
- Recreation
- Wildfire

Significant Effects and Mitigation Measures

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

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

Not every individual treatment project will have all of the significant environmental impacts that the CalVTP was determined to contribute to or cause. Additionally, some of the environmental impacts predicted by the CalVTP PEIR to be significant and unavoidable or less than significant after mitigation may be determined in a PSA to be less severe for an individual treatment project than determined in the statewide PEIR. The impacts and mitigation measures identified in Sections 8.1 and 8.2 below reflect the conclusions of the PSA by indicating which of the CalVTP's impacts that this treatment project will contribute to or cause. By indicating the project-specific effects of this treatment project

as follows, the Project Proponent's decisionmaker or decision making body is hereby making the required findings under CEQA regarding the application or feasibility of mitigation measures to reduce those impacts.

Findings for Impacts Mitigated to Less Than Significant

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

Archaeological, Historical, and Tribal Cultural Resources

☒ **Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource**

- ☒ Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

Biological Resources

☒ **Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications**

- ☒ Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA
- ☒ Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA

☒ **Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications**

- ☒ Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)
- ☒ Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
- ☒ Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities).
- ☒ Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
- ☒ Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands

☒ **Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function**

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

☒ **Impact BIO-4: Substantially Affect State or Federally Protected Wetlands**

- ☒ Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands

☒ **Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries**

☒ Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites

Hazardous Materials, Public Health and Safety

☒ **Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites**

☒ Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites

Findings for Significant and Unavoidable Impacts

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

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

Air Quality

☒ **Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that Would Exceed CAAQS Or NAAQS and Conflict with Regional Air Quality Plans**

☒ Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques

☒ **Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk**

☒ Mitigation Measure GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns

☒ **Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning**

☒ No feasible mitigation is available.

Archaeological, Historical, and Tribal Cultural Resources

☒ **Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources**

☒ Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

Greenhouse Gas Emissions

☒ **Impact GHG-2: Generate GHG Emissions through Treatment Activities**

☒ Mitigation Measure GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns

Cumulative

Aesthetics

☐ **Cumulative Aesthetics Impact related to Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway**

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

Air Quality

☒ **Cumulative Air Quality Impact related to On-Road Vehicle and Off-Road Equipment Exhaust Emissions**

☒ Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques

Archaeological, Historical, and Tribal Cultural Resources

☒ **Cumulative Archaeological, Historical, and Tribal Cultural Resources Impact related to Inadvertent Discoveries of Unique Archaeological Resources**

☒ Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

Biological Resources

☒ **Cumulative Biological Resources Impact related to Bumble Bees**

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

Transportation

☒ **Cumulative Transportation Impact related to Vehicle Miles Travelled**

☒ No feasible mitigation is available.

Statement of Overriding Considerations[1]

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

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

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

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

- The CalVTP will reduce dire risks to life, property, and natural resources in California.
- The CalVTP reflects the most current and commonly accepted science and conditions in California and allows for adaptation in response to potential evolution and changes in science and conditions.
- The CalVTP reflects the Board's and CAL FIRE's goals. The CalVTP will help the Board and CAL FIRE achieve their central goals for reducing and preventing the impacts of fire in the state, as outlined in the *2018 Strategic Fire Plan for California*. The CalVTP will help to establish a natural environment that is more resilient and built assets that are more resistant to the occurrence and effects of wildland fire.
- The CalVTP will help implement Executive Orders, including:
  - EO B-42-17: Governor Brown's order issued to bolster the state's response to unprecedented tree die-off through further expediting removal of millions of dead and dying trees across the state;

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

  - EO B-52-18: Governor Brown's order to improve forest management and restoration, provide regulatory relief, and reduce barriers for prescribed fire; and
  - EO N-05-19: Governor Newsom's order directing CAL FIRE to recommend immediate-, medium-, and long-term actions to help prevent destructive wildfires.
- The Board is required by law to comply with SB 1260, signed into law by Governor Brown in February 2018, which improves California forest management practices to reduce the risk of wildfire in light of the changing climate and includes provisions for the CalVTP PEIR to serve as the programmatic CEQA coverage for prescribed burns within the SRA. The CalVTP will bring the Board into compliance with these requirements.
- The Board is required by law to comply with SB 632, signed into law by Governor Newsom in October 2019, which requires the Board to certify a Final PEIR, pursuant to CEQA, for the vegetation treatment program filed with the State Clearinghouse under Number 2019012052 in January 2019. The CalVTP will bring the Board into compliance with this requirement.
- The CalVTP will help to meet California's GHG emission goals consistent with the California Forest Carbon Plan, California's 2017 Climate Change Scoping Plan, Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada, and California 2030 Natural and Working Lands Climate Change Implementation Plan.

Appendix C

Biological Resources Assessment Summary

Biological Resources Assessment Summary

Woodpecker Ravine Shaded Fuel Break Phase 1

APRIL 2025

Prepared for:

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1 Introduction

This appendix was prepared in support of the Nevada County Office of Emergency Services (OES) Woodpecker Ravine Shaded Fuel Break Phase I Project (project), in western Nevada County, California. Nevada County OES has evaluated the proposed treatments for CEQA compliance as later activities covered by the California Department of Forestry and Fire Protection (CAL FIRE) California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR). The PEIR provides guidelines for impact assessment under California Environmental Quality Act disciplines, including biological resources. This memorandum provides methods and results of analysis for determining biological resources occurring in the project site and vicinity, and recommendations for implementing PEIR requirements and mitigation measures.

1.1 Project Location

The project site is approximately 1 to 5 miles southeast of the Grass Valley city limits in western Nevada County, California (see Figure 1, Biological Study Area; all figures can be found in Attachment A). State Route (SR) 49 is approximately 1 to 2 miles west of the site, and SR-174 generally parallels the northern and eastern extent of the site. The project site occupies portions of Township 15 North, Ranges 8 East and 9 East, and projected Sections 1, 5, 6, 7, 8, 12, 13, 17, 18, 19, 20, 24, 29, and 30 of the 'Grass Valley' and 'Chicago Park' U.S. Geologic Survey (USGS) 7.5-minute topographic quads. The approximate center of the project site corresponds to 39.1606240 latitude and -121.0112254 longitude (decimal degrees).

1.2 California Vegetation Treatment Program PEIR

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

Impact Bio-1	Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modification
Impact Bio-2	Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modification
Impact Bio-3	Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation That Leads to Loss of Habitat Function
Impact Bio-4	Substantially Affect State or Federally Protected Wetlands
Impact Bio-5	Interfere Substantially with Wildlife Movement or Impede use of Nurseries
Impact Bio-6	Substantially Reduce Habitat or Abundance of Common Wildlife, Including Nesting Birds
Impact Bio-7	Conflict with Local Policies or Ordinances Protecting Biological Resources
Impact Bio-8	Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan

The PEIR includes several standard project requirements (SPRs) designed to avoid and/or minimize the above-identified potential impacts. It also includes mitigation measures (MMs) to be implemented where impacts are still potentially significant after implementation of the SPRs. SPR BIO-1 requires data review and a reconnaissance-level biological survey as the first steps to identifying potential impacts. The following sections include methods and results of the data review and reconnaissance-level survey, and general recommendations for implementing the SPRs and MMs to ensure the project does not result in significant impacts to biological resources.

2 Methods

SPR BIO-1 identifies sources and types of sources to be consulted for the data review, the purposes of the reconnaissance-level survey, and steps to be taken depending on biological resources identified and potential impacts to these resources. This section provides details of the methods for the literature review and the reconnaissance-level survey conducted for the project.

2.1 Biological Study Area

For the purposes of this assessment, the 2,721-acre Biological Study Area (BSA) consists of 384 private parcels comprising 2,644 acres and 77 acres of right-of-way. The boundary of the BSA was revised after field surveys were conducted in 2024; therefore, areas covered by the field survey (described further below) within the current BSA are visually depicted on Figure 2, Vegetation Communities and Land Cover Types.

2.2 Literature Review

SPR BIO-1 requires that the data review includes "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" and "the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society's Rare Plant Inventory, relevant BIOS queries, and relevant general and regional plans." Therefore, Dudek conducted a review of numerous public databases covering the BSA. This primarily consisted of a spatial overlay of public GIS datasets with the BSA. GIS data was acquired from the following sources:

- California Natural Diversity Database (CNDDB) (CDFW 2025a)
- Spotted Owl Observations Database (CDFW 2025b)
- California Native Plant Society's Inventory of Rare and Endangered Plants (CNPS 2025a)
- CAL FIRE Fire and Resource Assessment Program (FRAP) California Vegetation by Wildlife Habitat Relationship Type (CAL FIRE 2015)
- iNaturalist Species Observations (iNaturalist 2025)
- U.S. Department of Agriculture's Soil Survey Geographic Database (SSURGO; USDA 2025a)
- USFWS National Wetlands Inventory Dataset (USFWS 2025a)
- USFWS Information, Planning, and Conservation (IPaC) Trust Resource Report (USFWS 2025b)
- USFWS Critical Habitat for Threatened and Endangered Species (USFWS 2025c)
- USGS Watershed Boundary Dataset (USGS 2025a)
- USGS National Hydrography Dataset (USGS 2025b)

The IPaC report was based on a query of the BSA. The CNDDB and California Native Plant Society database were queried for the nine USGS 7.5-minute quadrangles containing and immediately surrounding the BSA (F*rench Corral, Nevada City, North Bloomfield, Rough and Ready, Grass Valley, Chicago Park, Wolf, Lake Combie*, and *Colfax*) (CNPS 2025; CDFW 2025). iNaturalist was filtered for verifiable and research grade occurrences was searched as supplemental to the above listed databases (iNaturalist 2025).

To determine lists of potentially occurring special-status plant and wildlife species, Dudek biologists referred to PEIR Appendix BIO-3, Special-Status Species Tables (CBFFP 2019). The CNDDB, California Native Plant Society database, iPaC, and iNaturalist queries were used to identify any supplemental species for further analysis. The final list of species that have potential to occur was determined based on factors such as habitat types, soils, and elevation preferences, as well as the known geographic range and nearest occurrence records of each species.

2.3 Field Reconnaissance

Dudek biologists surveyed portions of the BSA on April 30, 2024, and May 24, 2024, excluding areas where access was not obtained or new areas associated with the revised project boundary (see Section 2.1 for details; Table 1). The surveys focused on biological resources covered in the PEIR impact analysis (Impacts BIO-1 through BIO-8, listed above), but also considered the potential for impacts not addressed in the PEIR.

Table 1. Reconnaissance Survey Dates, Personnel, Conditions

Date/Time	Personnel	Location	Conditions
4/30/2024 10:00 am–4:10 pm	Allie Sennett Paul Keating	See Figure 2 in Attachment A	62–68°F; 0-10% cloud cover; 0–3 mph wind
5/24/2024 10:00 am–2:00 pm	Allie Sennett Paul Keating		69–70°F; 0% cloud cover; 0–3 mph wind

ESRI Collector on a mobile device with an overlay of the project boundaries were used to verify vegetation communities, aquatic resources, and record other sensitive biological resources. The focus of the field visit was to assess overall habitat suitability for the target species identified through the literature review described above. All plant and wildlife species observed during the survey were recorded. Plant species were identified to the lowest taxonomic group possible. Wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly into a field notebook. The site was also scanned with binoculars to aid in the identification of wildlife. Representative photographs of the site are included in Attachment B, Photo Log.

No formal wetland delineation or focused surveys for special-status plants or wildlife were conducted. The field visit was sufficient to generally describe aquatic features in the BSA that could be subject to regulation by the U.S. Army Corps of Engineers, Regional Water Quality Control Board (RWQCB), and/or the California Department of Fish and Wildlife (CDFW) under Sections 401 and 404 of the federal Clean Water Act, the Porter-Cologne Water Quality Control Act, and Section 1600 of the California Fish and Game Code, respectively.

3 Results

3.1 Environmental Setting

3.1.1 Topography

The BSA is characterized by foothills bisected roughly northeast-southwest by ridgelines and valleys associated with Woodpecker Ravine and South Wolf Creek. Elevations in the BSA range from approximately 1,719 to 2,923 feet above mean sea level (amsl). Low elevations in the BSA are primarily located along Woodpecker Ravine near South Wolf Creek and along South Wolf Creek in the southern portion of the BSA. High elevations are more common in the northern portion of the BSA.

3.1.2 Soils and Geology

Geology in the BSA is a combination of three generalized rock types: Mesozoic metavolcanic rocks, Mesozoic plutonic rocks, pre-Cenozoic mixed rocks, and tertiary volcanic rocks (Data Basin 2025). These generalized rock types include andesite and rhyolite flow rocks, greenstone, volcanic breccia and other pyroclastic rocks, basaltic pillow lava, diabase, greenstone, and minor pyroclastic rocks, Gabbro and dark dioritic rocks, tertiary pyroclastic and volcanic mudflow deposits, and undivided pre-Cenozoic metasedimentary and metavolcanic rocks of great variety, such as slate, quartzite, hornfels, chert, phyllite, mylonite, schist, gneiss, and minor marble. According to the Natural Resources Conservation Service (NRCS), the following 27 soil mapping units are present in the BSA:

- Aiken cobbly loam, 2 to 30 percent slopes
- Aiken loam, 2 to 9 percent slopes, N low-mid montane
- Aiken loam, 9 to 15 percent slopes, high precipitation
- *Alluvial land, clayey*
- Boomer loam, 5 to 15 percent slopes
- Boomer, hard bedrock - Rock outcrop complex, 15 to 60 percent slopes
- Boomer, hard bedrock - Rock outcrop complex, 5 to 30 percent slopes
- Cohasset cobbly loam, 5 to 30 percent slopes
- Cohasset loam, summits, 2 to 15 percent slopes
- Josephine loam, 15 to 30 percent slopes
- Josephine loam, 30 to 50 percent slopes
- Josephine loam, 9 to 15 percent slopes
- Josephine rock-Outcrop complex, 15 to 50 percent slopes
- Josephine-Mariposa complex, 15 to 50 percent slopes, eroded
- Mariposa gravelly loam, 2 to 30 percent slopes
- Mariposa-Josephine complex, 50 to 75 percent slopes, eroded
- Mariposa-Maymen complex, 50 to 75 percent slopes, eroded
- Mariposa-Rock outcrop complex, 2 to 50 percent slopes

- Maymen-Mariposa complex, 2 to 50 percent slopes, eroded
- Rock outcrop-Dubakella complex, 5 to 50 percent slopes
- Secca-Rock outcrop complex, 2 to 50 percent slopes
- Sierra sandy loam, deep, 9 to 15 percent slopes, LRU 18XI
- *Sites silt loam, 15 to 30 percent slopes, N low montane*
- *Sites silt loam, 2 to 9 percent slopes, N low montane*
- *Sites silt loam, 9 to 15 percent slopes, N low montane*
- Sites very stony loam, 15 to 50 percent slopes
- Sites very stony loam, 2 to 15 percent slopes

Within the BSA, there are four soil mapping units identified by the NRCS as hydric[1]; these units are presented as italic text in the above bulleted list (USDA 2025a, 2025b). Soil mapping unit and generalized rock type by parcel in the BSA are presented in Table 1 in Attachment C, Summary Tables.

3.1.3 Hydrologic Setting

The BSA occurs within the Wolf Creek HUC-10 watershed (1802012602) and more specifically in the HUC-12 subwatersheds for Rattlesnake Creek-Wolf Creek (180201260202) and South Wolf Creek (180201260201) (USGS 2025a). Wolf Creek is the main creek running through the watershed where the BSA is located, beginning just north of the city of Grass Valley, flowing through the city, and turning south to eventually meet the Bear River at Nevada County's southern boundary. The creek and its tributaries, several of which run through the BSA, drain a large portion of southwestern Nevada County.

The Wolf Creek watershed was historically a center for gold mining from the 1850s to the 1950s, and is one of the most heavily mined watersheds in the state of California. The legacy of this intensive activity has included alteration of streams due to placer mining, extensive deforestation, and the release of several different heavy metals and toxins into the soil and aquatic environments. The urbanization and development that stemmed from the gold rush in the 1850s, and has intensified over recent decades, has also led to continued degradation in the watershed.

Based on USGS (2025b) data, there are approximately 9.4 linear miles of streams, canals, and ditches in the BSA, including 4,635 linear feet in the potential treatment area and 46,214 linear feet in the CalVTP treatable landscape (Table 2). Based on USFWS (2025a) data, there are approximately 33.5 acres of aquatic resources composed of freshwater emergent wetland, freshwater forest/shrub wetland, freshwater pond, and riverine in the BSA (Table 3). Figure 3, Potential Aquatic Resources, visually depicts watersheds, FEMA flood zones, NHD resources, and National Wetlands Inventory (NWI) resources in the BSA and vicinity. FEMA flood zones, NHD resources, and NWI resources present by parcel in the BSA are summarized in Table 2 in Attachment C.

[1] Soils commonly associated with wetlands and streams.

Table 2. National Hydrography Dataset Resources in the BSA

NHD Resource Type	Linear Feet in the BSA		
	Potential Treatment Area	Treatable Landscape	Total
Unnamed Canal/Ditch	521.38	5,658.50	6,179.89
Unnamed Pipeline	325.37	1,103.13	1,428.50
Unnamed Intermittent Stream/River	2,857.39	21,748.04	24,605.43
Unnamed Perennial Stream/River	106.48	9,591.66	9,698.15
Little Wolf Creek	0.0	1,740.95	1,740.95
South Wolf Creek	824.31	6,371.84	7,196.15
Total	**4,634.94**	**46,214.13**	**50,849.07**

Source: USGS 2025b.
Note: Totals may not sum due to rounding.

Table 3. National Wetlands Inventory Resources in the BSA

NWI Resource Type	Acreage in the BSA		
	Potential Treatment Area	Treatable Landscape	Total
Freshwater Emergent Wetland	0.31	1.13	1.44
Freshwater Forested/Shrub Wetland	0.73	11.86	12.59
Freshwater Pond	2.06	4.85	6.91
Riverine	1.44	11.14	12.57
Total	**4.54**	**28.98**	**33.52**

Source: USFWS 2025a.
Note: Totals may not sum due to rounding.

3.1.4 Vegetation Communities and Land Cover Types

Land cover in the BSA consists of a combination of terrestrial non-vegetative land covers, natural vegetation communities, and non-natural cover types. The CAL FIRE FRAP vegetation layer was used to ascertain vegetation categories present in the BSA. This FRAP vegetation layer is created by combining multiple datasets that represent the most reliable land cover information available for the entire state. The data from these diverse sources is transformed into California Wildlife Habitat Relationships (CWHR) habitat types and consolidated into a unified vegetation layer encompassing the entire state (CDFW 2014). The FRAP vegetation layer stands as the most extensive and comprehensive dataset for vegetation mapping within the state (CAL FIRE 2015).

Ten vegetation communities and three land cover types were mapped in the BSA. These vegetation communities and land cover types are summarized in Table 4 and described further below. The plant community descriptions and nomenclature discussed are based on descriptions from the CWHR system and A Manual of California Vegetation, Second Edition (MCV2) (CDFW 2014; CNPS 2025b). The lacustrine land cover type mapped in the CWHR system corresponds to Freshwater Emergent Wetland and is covered further in Section 3.2.4. Vegetation communities and land cover types present by parcel in the BSA are summarized in Table 3 in Attachment C.

Table 4. Vegetation Communities and Land Cover Types in the BSA

Vegetation Communities and Land Cover Types	Acreage	Percent of BSA
Annual Grassland	99.0	3.64%
Blue Oak Woodland	43.8	1.61%
Blue Oak Woodland – Foothill Pine	53.6	1.97%
Cropland	99.0	3.64%
Douglas Fir	170.0	6.25%
Lacustrine	0.5	0.02%
Mixed Chaparral	85.4	3.14%
Montane Hardwood	662.3	24.34%
Montane Hardwood – Conifer	467.2	17.17%
Montane Riparian	16.9	0.62%
Ponderosa Pine	1019.3	37.46%
Urban	3.5	0.13%
Vineyard	0.5	0.02%
Total	2,721	100%

Note: Totals may not sum due to rounding.

Annual Grassland

Annual grassland comprises approximately 99 acres (4%) of the BSA. Annual grasslands are open grasslands composed primarily of annual herbaceous and forb species. This vegetation community type exists in scattered areas throughout the BSA where introduced annual grasses are the dominant plant species. These include wild oats (*Avena fatua, A. barbata*), soft chess (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), red brome (*B. tectorum*), wild barley (*Hordeum murinum* ssp. *leporinum*), and rattail sixweeks grass (*Festuca myuros*). Common forbs include broadleaf filaree (*Erodium botrys*), redstem filaree (*E. cicutarium*), turkey mullein (*Croton setiger*), true clovers (*Trifolium* spp.), bur clover (*Medicago polymorpha*), popcorn flower (*Plagiobothrys* spp.), California poppy (*Eschscholzia californica*), and many others. Annual grassland occurs mostly on flat plains to gently rolling foothills.

Blue Oak Woodland

Blue oak woodland comprises approximately 44 acres (2%) of the BSA. Blue oak woodlands have an over story of scattered trees, although the canopy can be nearly closed. The canopy is dominated by broad-leaved trees 16 feet to 50 feet tall, commonly forming open savanna-like stands on dry ridges and gentle slopes. Blue oak (*Quercus douglasii*) is typically the dominant tree species. Shrubs such as poison oak (*Toxicodendron diversilobum*), California coffeeberry (*Frangula californica*), buckbrush (*Ceanothus cuneatus*), and redberry (*Rhamnus crocea*) are often present but rarely extensive, and often occur on rock outcrops. Typical understory is composed of an extension of annual grassland vegetation described above. Blue oak woodland typically corresponds to the *Quercus douglasii* Woodland Alliance (CNPS 2025b).

Blue Oak – Foothill Pine

Blue oak–foothill pine comprises approximately 54 acres (2%) of the BSA. This vegetation community is typically diverse in structure both vertically and horizontally, with a mix of hardwoods, conifers, and shrubs. The shrub component is typically composed of several species that tend to be clumped, with interspersed patches of annual

grassland, as described above. Blue oak and foothill pine (*Pinus sabiniana*) typically comprise the overstory of this habitat, with blue oak usually most abundant. Stands dominated by foothill pine tend to lose their blue oak, which is intolerant of shade. In the foothills of the Sierra Nevada, including the BSA, tree species typically associated with this vegetation community are interior live oak (*Quercus wislizeni*) and California buckeye (*Aesculus californica*). This vegetation community most closely corresponds to the *Quercus douglasii* Woodland Alliance (CNPS 2025b).

Douglas Fir

Douglas fir comprises approximately 170 acres (6%) of the BSA. This vegetation community forms a complex mosaic of forest expression due to the geologic, topographic, and successional variation typical within its range. Typical aggregations include a lower overstory of dense, broad-leaved evergreen trees such as tanoak (*Notholithocarpus densiflorus*) and Pacific madrone (*Arbutus menziesii*), with an irregular, often open, higher overstory of tall needle-leaved evergreen trees (Douglas-fir [*Pseudotsuga menziesii*]). This vegetation community is primarily located at the slightly higher elevations in the northern extent of the BSA and corresponds most closely to the *Pseudotsuga menziesii - (Notholithocarpus densiflorus - Arbutus menziesii)* Forest and Woodland Alliance (CNPS 2025b).

Mixed Chaparral

Mixed chaparral comprises approximately 85 acres (3%) of the BSA**.** Mixed chaparral is a structurally homogeneous brushland type dominated by shrubs with thick, stiff, heavily cutinized evergreen leaves. Shrub height and crown cover vary with age since last burn, precipitation, aspect, and soil type. At maturity, cismontane mixed chaparral typically is a dense, nearly impenetrable thicket. On poor sites, serpentine soils or transmontane slopes, shrub cover may be considerably reduced, and shrubs may be shorter. Leaf litter and standing dead material may accumulate in stands that have not burned for several decades (CDFW 2014). Mixed chaparral can correspond to multiple communities (alliances) as described in the MCV2 depending upon the species composition. Within the BSA, mixed chaparral occurs mostly on gently rolling foothills and corresponds most closely with the *Quercus wislizeni - Quercus chrysolepis* (shrub) Shrubland Alliance (CNPS 2025b).

Montane Hardwood

Montane hardwood comprises approximately 662 acres (24%) of the BSA**.** A typical montane hardwood vegetation community is composed of a pronounced hardwood tree layer, with an infrequent and poorly developed shrub stratum, and a sparse herbaceous layer. At higher elevations, scattered huckleberry oak (*Quercus vacciniifolia*) is present amongst an overstory of various conifers including ponderosa pine (*Pinus ponderosa*), Coulter pine (*Pinus coulteri*), California white fir (*Abies concolor*), and Jeffrey pine (*Pinus jeffreyi*). At mid–elevations, typical associates include Douglas-fir (*Pseudotsuga menziesii*), tanoak (*Notholithocarpus densiflorus*), Pacific madrone (*Arbutus menziesii*), California black oak (*Quercus kelloggii*), and bristlecone fir (*Abies bracteata*). At lower elevations knobcone pine (*Pinus attenuata*), foothill pine, Oregon white oak (*Quercus garryana*). Understory vegetation is mostly scattered woody shrubs and a few forbs. Montane hardwood within the BSA corresponds to the *Acer marcophyllum* Forest and Woodland Alliance (CNPS 2025b).

Montane Hardwood-Conifer

Montane hardwood-conifer comprises approximately 467 acres (17%) of the BSA. Montane hardwood-conifer habitat includes both conifers and hardwoods, often as a closed forest. To be considered montane hardwood-conifer vegetation community, at least one-third of the trees must be conifer and at least one-third must be broad-leaved. Common species within this vegetation community in the foothills of the Sierra Nevada where the BSA is

located include California black oak, bigleaf maple (*Acer macrophyllum*), tanoak, and Pacific madrone with ponderosa pine, white fir, incense-cedar (*Calocedrus decurrens*), Douglas-fir, and sugar pine (*Pinus lambertiana*) forming the overstory. Montane hardwood within the BSA corresponds to the *Quercus kelloggii* Forest and Woodland Alliance (CNPS 2025b).

Montane Riparian

Montane riparian comprises approximately 17 acres (<1%) of the BSA. Montane Riparian is present in small, fragmented patches primarily along drainages and wetted areas throughout the BSA. The tree and shrub layers may be composed of broadleaf trees, including bigleaf maple, Fremont cottonwood (*Populus fremontii*), Goodding's willow (*Salix gooddingii*), and white alder (*Alnus rhombifolia*). Understory vegetation is typically denser and taller where tree cover is absent and includes sedge (*Carex* sp.), rush (*Juncus* sp.), Himalayan blackberry (*Rubus armeniacus*), and scattered Annual Grassland. Montane riparian has more moisture in the soil and vegetation, and as a result, this vegetation community is unlikely to sustain the spread of a fast-moving or high-intensity wildfire. Within the BSA, this vegetation community corresponds most closely to the *Populus fremontii - Fraxinus velutina - Salix gooddingii* Forest and Woodland Alliance (CNPS 2025b).

Ponderosa Pine

Ponderosa pine comprises approximately 1,019 acres (37%) of the BSA. The ponderosa pine vegetation community includes pure stands of ponderosa pine as well as stands of mixed species in which at least 50 percent of the canopy area is ponderosa pine. Within the BSA, this vegetation community is associated with other species including Jeffrey pine, Douglas-fir, California black oak, Pacific madrone, and tanoak. Associated shrubs include manzanita (*Arctostaphylos* ssp.), ceanothus (*Ceanothus* ssp.), Pacific dogwood (*Cornus nuttallii*), and poison-oak (*Toxicodendron pubescens*). Typical understory is composed of an extension of annual grassland vegetation described above. Ponderosa pine vegetation communities in the BSA generally correspond to the *Pinus ponderosa* Forest and Woodland Alliance (CNPS 2025b).

Cropland

Cropland comprises approximately 99 acres (4%) of the BSA. This land cover type is characterized by areas in active agriculture and is an entirely man-made habitat. The structure of vegetation can vary in size, shape, and growing pattern. The dominant cropland use in the BSA is row crops. Typical crops consist of grasses, brassicas, and forbs. Subcategories of cropland habitat classifications include irrigated hayfield crop, irrigated row and field crop, and irrigated grain crop. Orchards and vineyards are classified separately.

Urban

Urban land cover comprises approximately 3.5 acres (<1%) of the BSA. This land cover type is completely altered, comprising residential homes, driveways, and other developed areas. Plant species within urban land cover types are typically comprised of ornamental and other non-native invasive plant species, with large, developed areas lacking vegetation.

Vineyard

Vineyard comprises approximately 0.5 acre (<1%) of the BSA. Vineyards are composed of single species planted in rows, usually supported on wood and wire trellises. Vines are normally intertwined in the rows, but open between

rows. Rows under the vines are usually sprayed with herbicides to prevent growth of herbaceous plants. Between rows of vines, grasses and other herbaceous plants may be planted or allowed to grow as a cover crop to control erosion. Vineyards can be found on flat alluvial soils in the valley floors, in rolling foothill areas, or on relatively steep slopes. Most vineyards are in valley or foothill areas.

3.1.5 Common Flora and Fauna

Sixty (60) native or naturalized plant species, 35 native (58%) and 25 non-native (42%), were recorded in the BSA during the field reconnaissance surveys on April 30, 2024, and May 24, 2024. One California Rare Plant Rank 4 species, Humboldt lily, was identified in the northeastern portion of the BSA. In addition, 23 wildlife species were recorded during the field surveys. Most wildlife species detected in the BSA were birds, such as American crow (*Corvus brachyrhynchos*), Steller's jay (*Cyanocitta stelleri*), red-shouldered hawk (*Buteo lineatus*), northern flicker (*Colaptes auratus*), and American robin (*Turdus migratorius*). Other wildlife species identified directly or by sign (e.g., scat, prints) included western gray squirrel (*Sciurus griseus*), black-tailed jackrabbit (*Lepus californicus*), mule deer (Odocoileus hemionus), and western fence lizard (*Sceloporus occidentalis*).

3.2 Sensitive Biological Resources

This section describes sensitive biological resources identified as present of potentially present in the project area. Refer to Attachment D, Recommendations for Biological Resources, for specific recommendations to avoid project-related impacts to these resources.

3.2.1 Sensitive Natural Communities

Sensitive natural communities are vegetation types, associations, or sub-associations that support concentrations of special-status plant and/or wildlife species, are of relatively limited distribution, and/or are of particular value to wildlife. Currently, CDFW publishes the California Sensitive Natural Communities List online. Natural Communities are evaluated using NatureServe's Heritage Methodology, the same system used to assign global and State rarity ranks for plant and animal species in the CNDDB. Evaluation is done at both the Global (full natural range within and outside of California) and State (within California) levels resulting in a single G (global) and S (State) rank, ranging from 1 (very rare and threatened) to 5 (demonstrably secure). According to the CDFW Vegetation Program, Natural Communities with State ranks of S1-S3 and certain other specified associations are considered imperiled, and thus, potentially of special concern. Riparian areas are also considered sensitive natural communities by CDFW.

The BSA supports three CDFW sensitive vegetation communities or land cover types including wetland and riparian communities: bigleaf maple forest and woodland, Fremont cottonwood forest and woodland, and valley oak woodland and forest. Impacts on high-quality occurrences of sensitive natural communities are typically considered significant under CEQA (CDFW 2025b).

- Bigleaf maple forest and woodland and Fremont cottonwood forest and woodland are sensitive natural communities state ranked S3 (vulnerable) (CDFW 2025b). Additionally, heritage trees and groves warrant protection under County policies and ordinances.
- Additionally, bigleaf maple forest and woodland and Fremont cottonwood forest and woodland are considered riparian vegetation communities which are also considered sensitive natural communities and fall under the jurisdiction of CDFW.

Seasonal wetland (mapped as lacustrine by FRAP) is not listed by CDFW as a sensitive natural community but has the potential to support sensitive plant and wildlife species.

3.2.2 Special-Status Plants

Results of USFWS and CNDDB database searches revealed 18 special-status plant species known to occur in the BSA region. Of these 18 species, eight were determined to have a low potential to occur or are not expected to occur in the BSA due to the lack of suitable habitat or the presence of very low-quality habitat within or adjacent to the BSA, the lack of documented occurrences near the BSA, and/or the site being outside of the species' known geographic or elevation range. These species are identified in Attachment E, Special-Status Plant Potential to Occur, but not addressed further. The remaining 10 plant species have moderate to high potential to occur in the BSA and are presented in Table 5. In addition, Humboldt lily (*Lilium humboldtii* ssp. *humboldtii*), a California Rare Plant Rank 4 species, was observed growing on duff-covered slopes below mixed conifer forest canopy in the northeastern portion of the BSA during the field surveys in April and May 2024. Species occurrence details and potential to occur determinations are included in Attachment E.

Table 5. Special-Status Plants with Potential to Occur

Species	Status (Federal/ State/CRPR)	Vegetation Type				
		Chaparral[1]	Cismontane Woodland[1]	Marshes and Swamps (Montane freshwater)[2]	Lower Montane Coniferous Forest[3]	Valley and Foothill Grassland[4]
Calycadenia spicata Spicate calycadenia	None/None/1B.3	—	X	—	—	—
Calystegia stebbinsii Stebbins' morning-glory	FE/SE/1B.1	X	X	—	—	—
Juncus digitatus finger rush	None/None/1B.1	X	X	—	—	—
Lewisia cantelovii Cantelow's lewisia	None/None/1B.2	X	X	—	X	—
Lyncopodiella inundata inundated bog-clubmoss	None/None/2B.2	—	—	—	X	—
Poa sierrae Sierra blue grass	None/None/1B.3	—	—	—	X	—
Rhynchospora capitellata	None/None/2B.2	—	—	X	X	—

Table 5. Special-Status Plants with Potential to Occur

Species	Status (Federal/ State/CRPR)	Vegetation Type				
		Chaparral[1]	Cismontane Woodland[1]	Marshes and Swamps (Montane freshwater)[2]	Lower Montane Coniferous Forest[3]	Valley and Foothill Grassland[4]
brownish beaked-rush						
Sidalcea stipularis Scadden Flat checkerbloom	None/SE/1B.1	—	—	X	—	—
Streptanthus tortuosus ssp. *truei* True's mountain jewelflower	None/None/1B.1	—	—	—	X	—
Viburnum ellipticum oval-leaved viburnum	None/None/2B.3	X	X	—	X	—

Notes: Additional information is in Attachment E, Special-Status Plant Species Potential to Occur.
X = occurs; — = does not occur
Status Legend:
FE: Federally listed as endangered
SE: State listed as endangered
SR: State rare
California Rare Plant Rank (CRPR) 1B: Plants rare, threatened, or endangered in California and elsewhere
CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
.1 Seriously threatened in California (over 80% of 80% of occurrences threatened/high degree and immediacy of threat)
.2 Moderately threatened in California (20–80% occurrences threatened/moderate degree and immediacy of threat)

1 Chaparral and cismontane woodland vegetation in the BSA includes the blue oak woodland, blue oak-foothill pine, mixed chaparral, and montane hardwood habitat types, which are present in abundance throughout the BSA.
2 Marsh and swamp (montane freshwater) vegetation in the BSA includes wetted areas throughout the montane hardwood and lower montane coniferous forest habitat types throughout the BSA.
3 Lower montane coniferous forest vegetation in the BSA includes the Douglas fir, montane hardwood-conifer, and ponderosa pine habitat types, which are present in abundance throughout the BSA.
4 Valley and foothill grassland vegetation in the BSA includes the non-native grasslands community, which is present throughout the BSA.

3.2.3 Special-Status Wildlife

Results of the USFWS and CNDDB database searches revealed 17 special-status wildlife species that are known to occur in the BSA region. Of the 17 species, seven of these species were determined to have a low potential to occur or are not expected to occur due to the lack of suitable habitat or the presence of very low-quality habitat within or adjacent to the BSA, the lack of documented occurrences near the BSA, or due to the BSA being outside of the species' known geographic or elevation range. These species are identified in Attachment F but not addressed further. The remaining 10 species have moderate to high potential to occur in the BSA and are presented in Table 6. Species occurrence details and potential to occur determinations are included in Attachment F.

Table 6. Special-Status Wildlife with Potential to Occur in the BSA

Species	Status (Federal/State)	Habitat Associations
Amphibians		
California red-legged frog (*Rana draytonii*)	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby, or emergent vegetation associated with deep, still, or slow-moving water; uses adjacent uplands.
Foothill yellow-legged frog – north Sierra DPS (*Rana boylii* pop. 3)	None/ST	Rocky streams and rivers with open banks in forest, chaparral, and woodland.
Birds		
American goshawk (*Accipiter atricapillus*)	None/SSC	Nests on cliffs, buildings, and bridges; forages in wetlands, riparian, meadows, and croplands, especially where waterfowl are present.
California black rail (*Laterallus jamaicensis coturniculus*)	None/ST, FP	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations.
Cooper's hawk (*Accipiter cooperii*)	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water
yellow-breasted chat (*Icteria virens*)	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush
Invertebrates		
Western bumble bee (*Bombus occidentalis occidentalis*)	None/SC	Inhabits meadows and grasslands and is commonly associated with plants that bloom from early February to late November, specifically plants in the following genera: *Cirsium, Erigonum, Solidago, Aster, Ceanothus, Centaurea*, and *Penstemon*. Nests primarily in underground cavities such as rodent burrows and occasionally aboveground in logs. Overwinters in the soil up to 2 inches from the surface. The flight period for queens occurs from early February to late November, peaking in late June and late September. The flight period for workers/males occurs from early April to early November, peaking in early August and early September
Mammals		
Fisher (*Pekania pennanti*)	None/SSC	Ranges widely in forested regions; uses heavy stands of mixed species of mature trees.
Townsend's big-eared bat (*Corynorhinus townsendii*)	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, human-made structures, and tunnels.
Reptiles		
northwestern pond turtle (*Actinemys marmorata*)	FPT/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter.

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

Status Legend:
FT: Federally listed as threatened
FPT: Federally proposed for listing as threatened
FP: California Fully Protected Species
SSC: California Species of Special Concern
WL: California Watch List Species
SE: State listed as endangered
SCE: State candidate for listing as endangered

In addition to the 10 special-status wildlife species identified above, the BSA and adjacent areas contain habitat for native bats protected by CFGC, and common and migratory bird species protected by MBTA and CFGC. These resources are discussed below.

Native Roosting Bats. Bat species that are naturally occurring in the state are protected by Section 4150 of the CFGC. Bats may use a variety of features for roosting, including trees with sufficient foliage, pealing bark, and cavities, as well as bridges, buildings, and other human-made structures. There are no documented bat roosts in or adjacent to the BSA. No roosting features with evidence of bat occupancy (e.g., urine staining, guano, insect droppings) were identified during the field survey; however, a focused survey for bats was not conducted. Bats could potentially roost in or near the BSA.

Nesting Birds and Raptors. The BSA provides suitable nesting habitat for numerous local and migratory bird or raptor species protected by the federal MBTA and CFGC. Specifically, trees, shrubs, woody debris piles, and human-made structures and buildings in the BSA provide suitable nesting habitat. Multiple common bird species were detected in or near the BSA during the field survey, including common raven, Steller's jay, and mountain chickadee. No active bird nests were observed during the field survey; however, the field survey did not include a focused survey for nests. Numerous bird species could nest in or adjacent to the BSA. The typical nesting season for birds in the project region is from mid-February through August.

3.2.4 Jurisdictional Aquatic Resources

Aquatic resources, including streams, wetlands, and floodplains are mapped within 250 feet of the BSA, and some of these features were verified as present during the field surveys. These resources may be jurisdictional waters subject to regulation by USACE, RWQCB, and/or CDFW pursuant to the Clean Water Act, Porter-Cologne Water Quality Act, and/or California Fish and Game Code. Known and potential aquatic resources were identified at throughout the BSA (shown in Figure 3) both through reconnaissance field surveys and desktop review of the USFWS NWI database and USGS NHD (USFWS 2025a; USGS 2025b). Aquatic resources identified by the reconnaissance survey include ephemeral and intermittent drainages, seasonal wetlands and swales, freshwater emergent wetland, perennial ponds and canals and ditches. The NWI database also identifies freshwater emergent wetland, freshwater forested/shrub wetland, freshwater pond, and riverine types (USFWS 2025a).

Riparian vegetation associated with aquatic resources is assumed to be under the jurisdiction of CDFW pursuant to Section 1600 of the California Fish and Game Code. These communities occur along streams, ponds, rivers, and lakes and are considered sensitive because of their high habitat value for native wildlife. Riparian habitat is associated with stream corridors including along Little Wolf Creek and South Wolf Creek as well as other intermittent and perennial streams throughout the BSA. Additionally, as described in Section 3.2.1, bigleaf maple forest and woodland and Fremont cottonwood forest and woodland identified within the BSA are considered riparian vegetation communities and would fall under the jurisdiction of CDFW.

3.2.5 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal. Because many wildlife species have species-specific habitat requirements for survival and dispersal, corridors may also be species-specific. At a minimum, corridors promote local colonization or recolonization of distinct habitat patches and potentially increase genetic variability within and between populations. In addition, increased exposure to an inhospitable urban matrix due to reductions in connectivity can increase general mortality. All of these factors can contribute significantly to local species extinctions. Thus, corridors help species populations, distributed in and among habitat patches, to persist over time.

The BSA is in a primarily rural residential environment with numerous paved/disturbed roadways and driveways. Further, fence lines associated with private parcels occur in and adjacent to the project site, and barbed-wire fences occur along property lines in various locations. Approximately 4% of the BSA is mapped in the FRAP data as developed or disturbed land (cropland, urban, vineyard), subject to frequent disturbance from mowing and vegetation maintenance. However, the field surveys conducted by Dudek biologists in April and May 2024 suggest that developed or disturbed land in the BSA is more expansive than mapped in FRAP. Further, approximately 77 acres of the BSA is classified as ROW, which primarily consists of the main roadways that intersect the BSA (including, but not limited to): Lower Colfax Road, Rattlesnake Road, Oak Ridge Drive, Mount Olive Road, and Honey Hollow Road. These factors reduce the permeability of the landscape.

The natural vegetation communities and land covers within the BSA (e.g., non-native annual grassland, blue oak woodland, blue oak woodland – foothill pine, Douglas fir, lacustrine, mixed chaparral, montane hardwood, montane hardwood – conifer, montane riparian, ponderosa pine) are contiguous with undisturbed habitats surrounding the BSA. The existing native vegetation communities in the BSA are assumed to support local wildlife movement by terrestrial wildlife species (i.e., birds, mammals, reptiles, amphibians, etc.). Larger and medium-size wildlife, such as Mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*), Virginia opossum (*Didelphis virginiana*), black-tailed jackrabbit, and northern gray fox (*Urocyon cinereoargenteus*) are likely to move through the project area. Mountain lion (*Puma concolor*), a wide-ranging species, also likely occurs in the area on occasion. The streams in the BSA likely also provide movement corridors for semi-aquatic species, such as foothill yellow-legged frog, California red-legged frog, and northwestern pond turtle. In addition, the BSA occurs partially within a wildlife linkage or landscape block associated with the Bear and Yuba rivers, based on data from the northern Sierra Nevada foothills wildlife connectivity project (CDFW 2015). As such, the BSA is likely used as a wildlife corridor or linkage due to its proximity to the existing patterns of natural landscape connectivity in the region.

4 Recommendations

Refer to Attachment D for specific recommendations for the proposed project to avoid and minimize potential impacts to biological resources. Attachment D, Recommendations for Biological Resources, was prepared to address the proposed project at a parcel level, which covers 384 private parcels (totaling 2,644 acres) and 77 acres of right-of-way, identified as potential treatment area on Figures 2 and 3 in Attachment A. Refer to Attachment G for a matrix of biological resource requirements for an approximately 369 ~~410~~ -acre treatment footprint associated with the proposed project, identified as field-verified treatment on Figure 4 in Attachment A.

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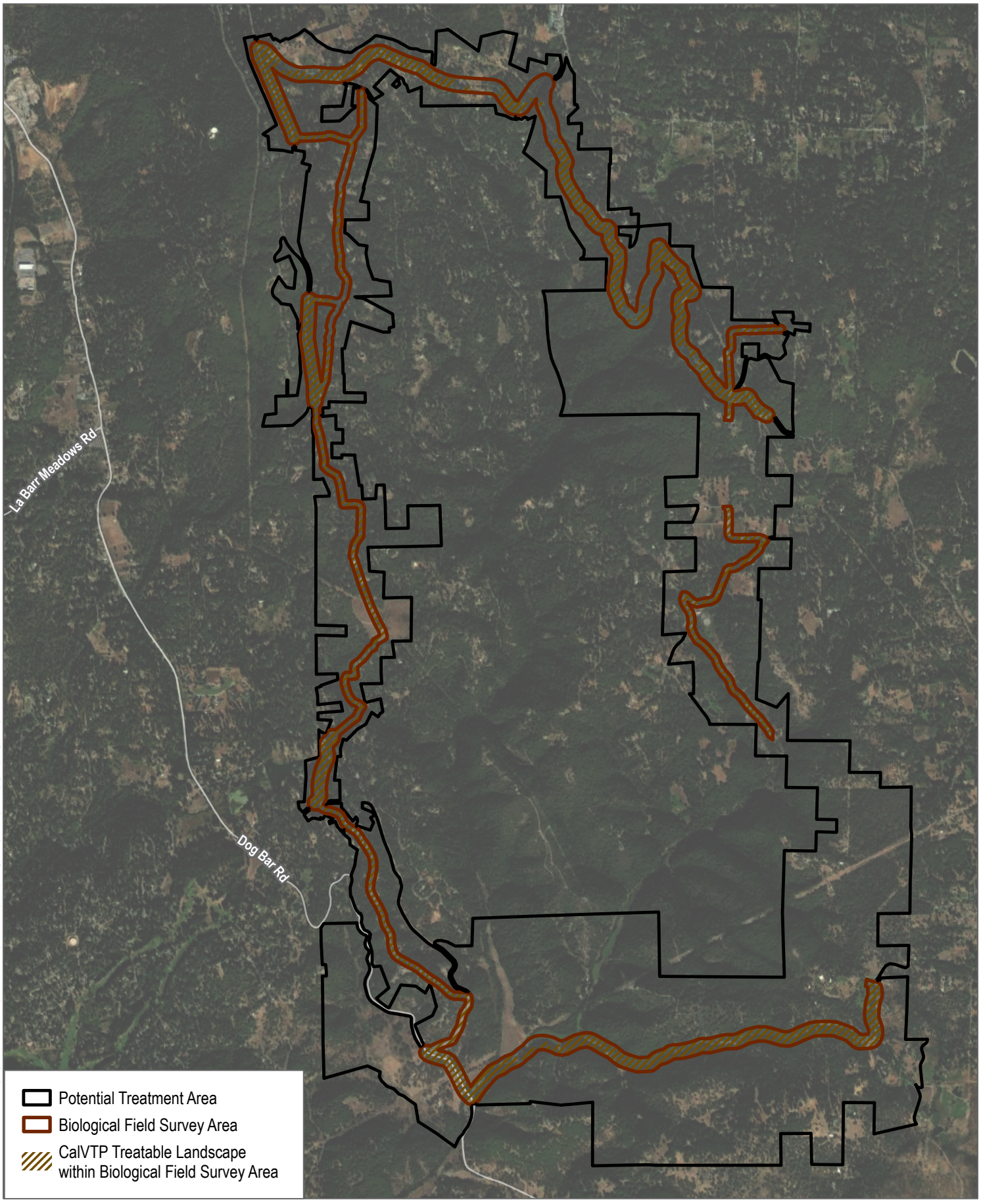
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Attachment A

Figures



SOURCE: Maxar 9/23/2023

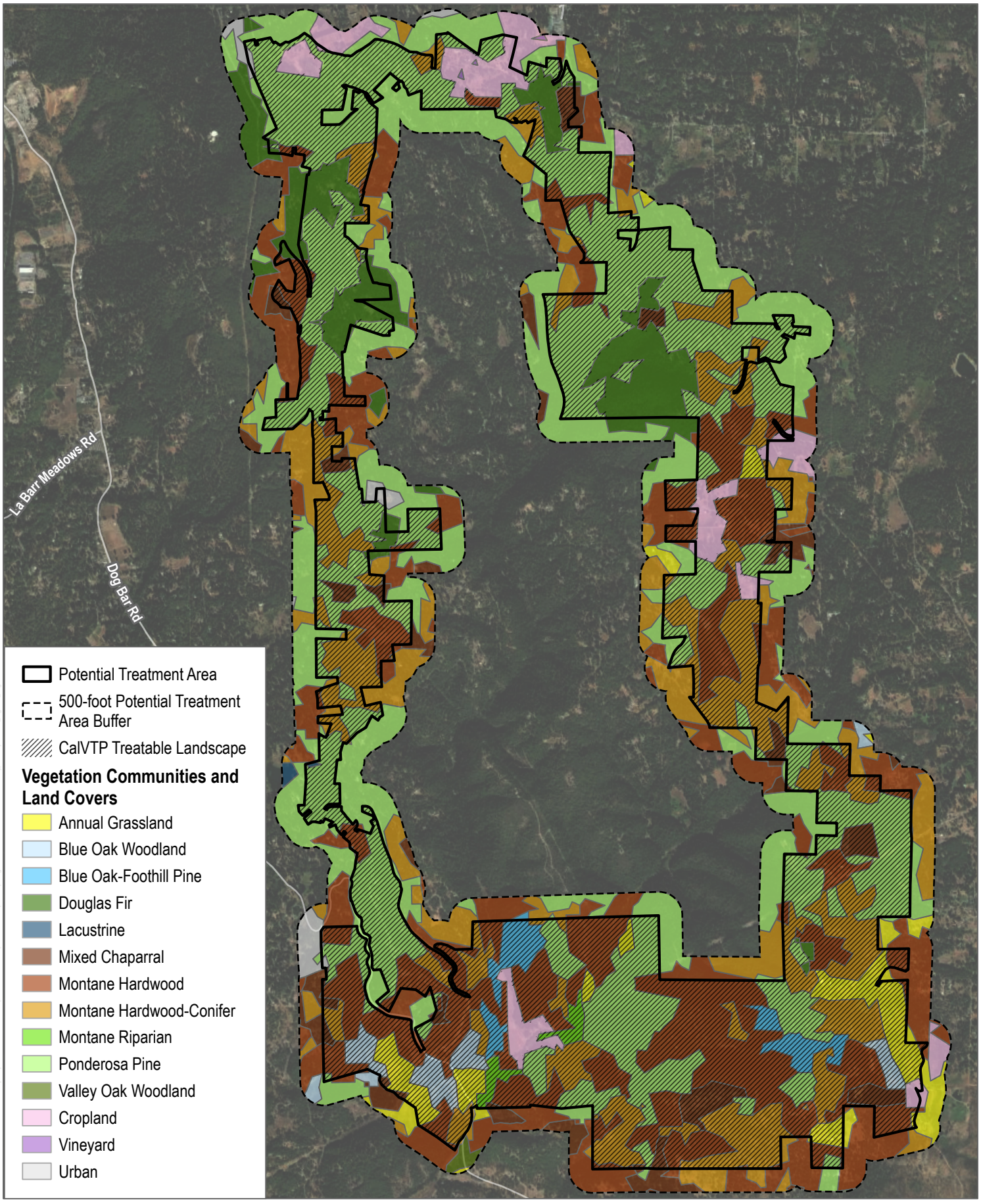
DUDEK

0 1,250 2,500 Feet

FIGURE 1

Biological Study Area

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023, CalFIRE FRAP Vegetation 2015

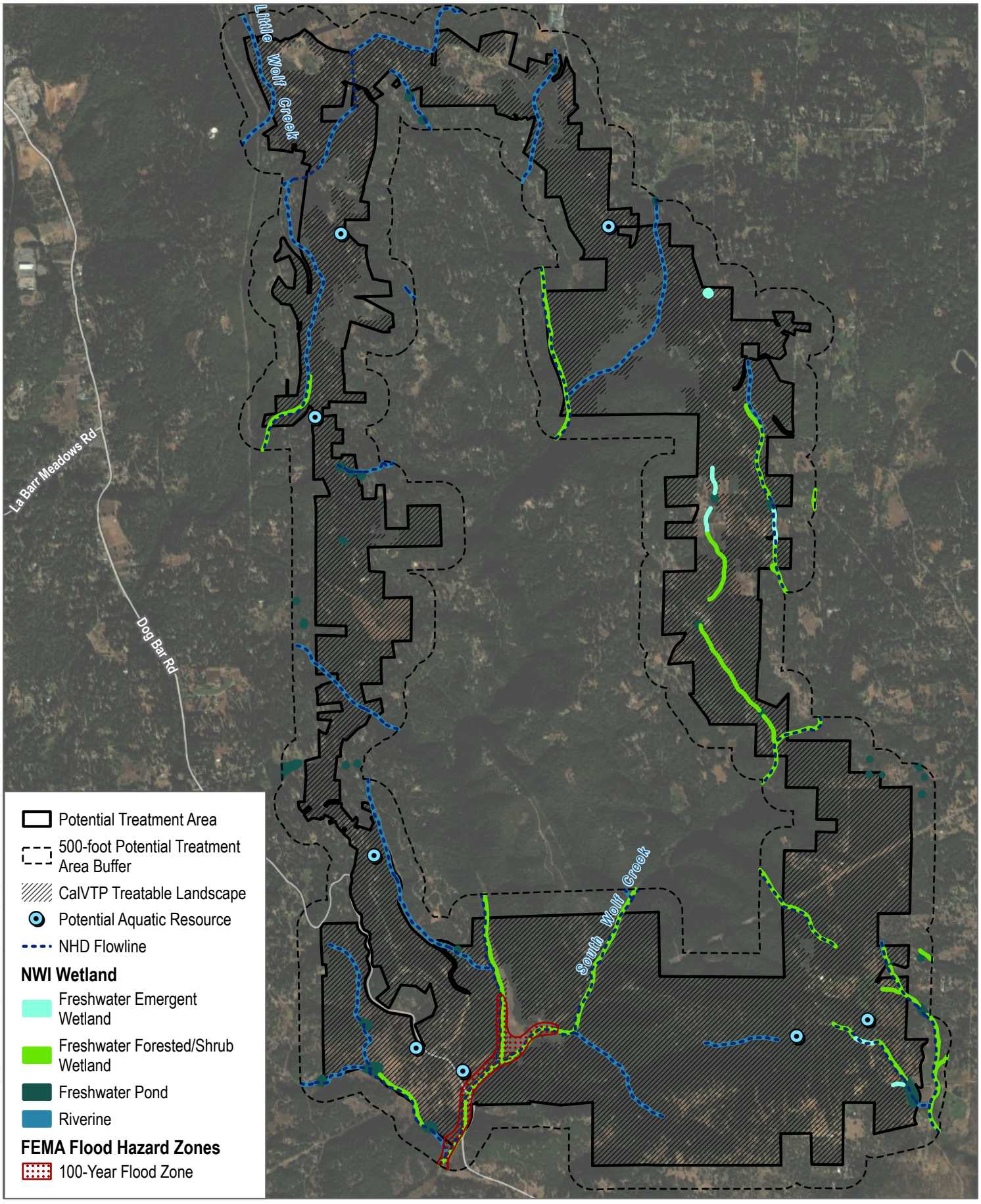
DUDEK

0 1,250 2,500 Feet

FIGURE 2

Vegetation Communities and Land Cover Types

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023, NHD, NWI, CalFIRE, FEMA

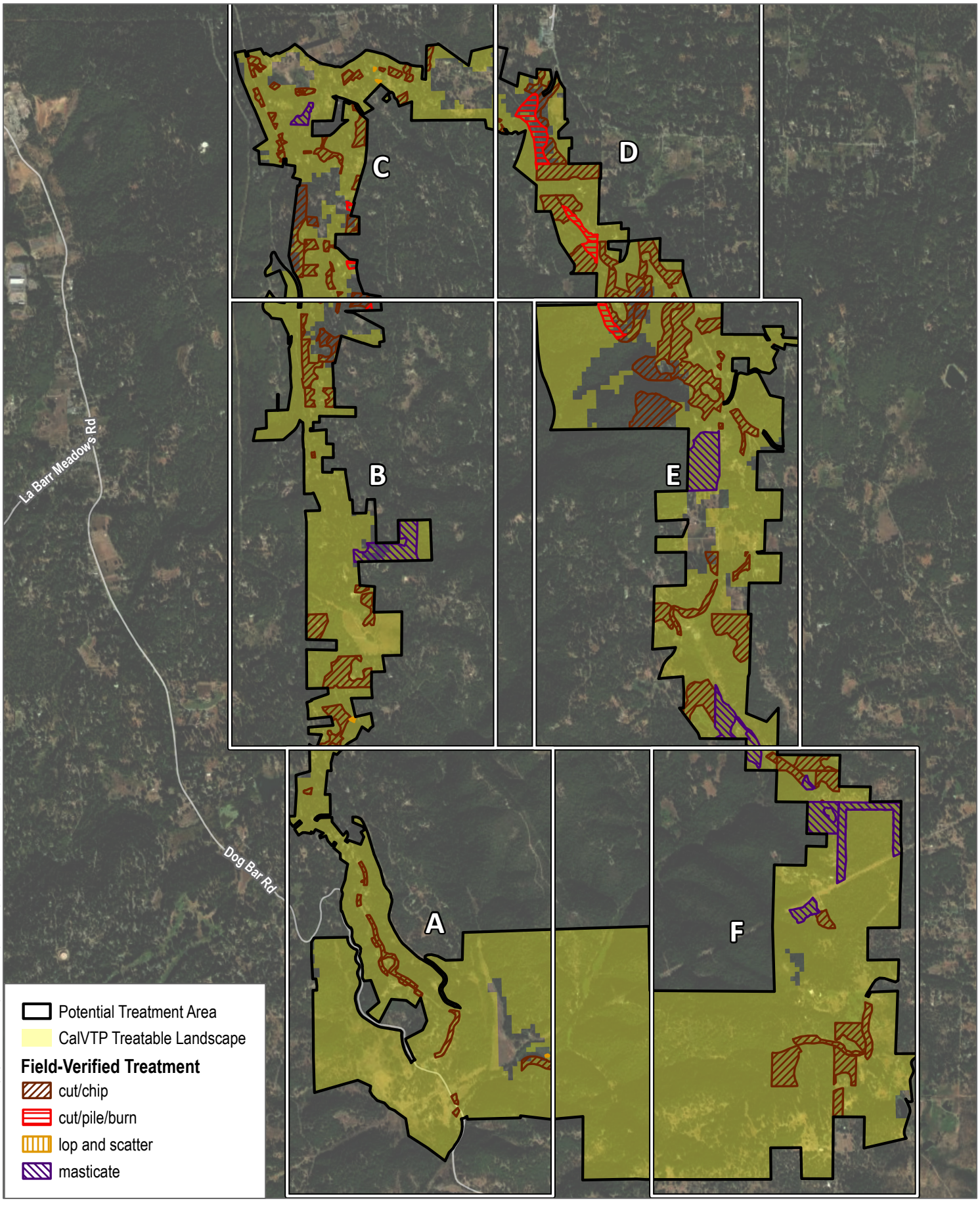
DUDEK

0 1,250 2,500 Feet

FIGURE 3

Potential Aquatic Resources

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

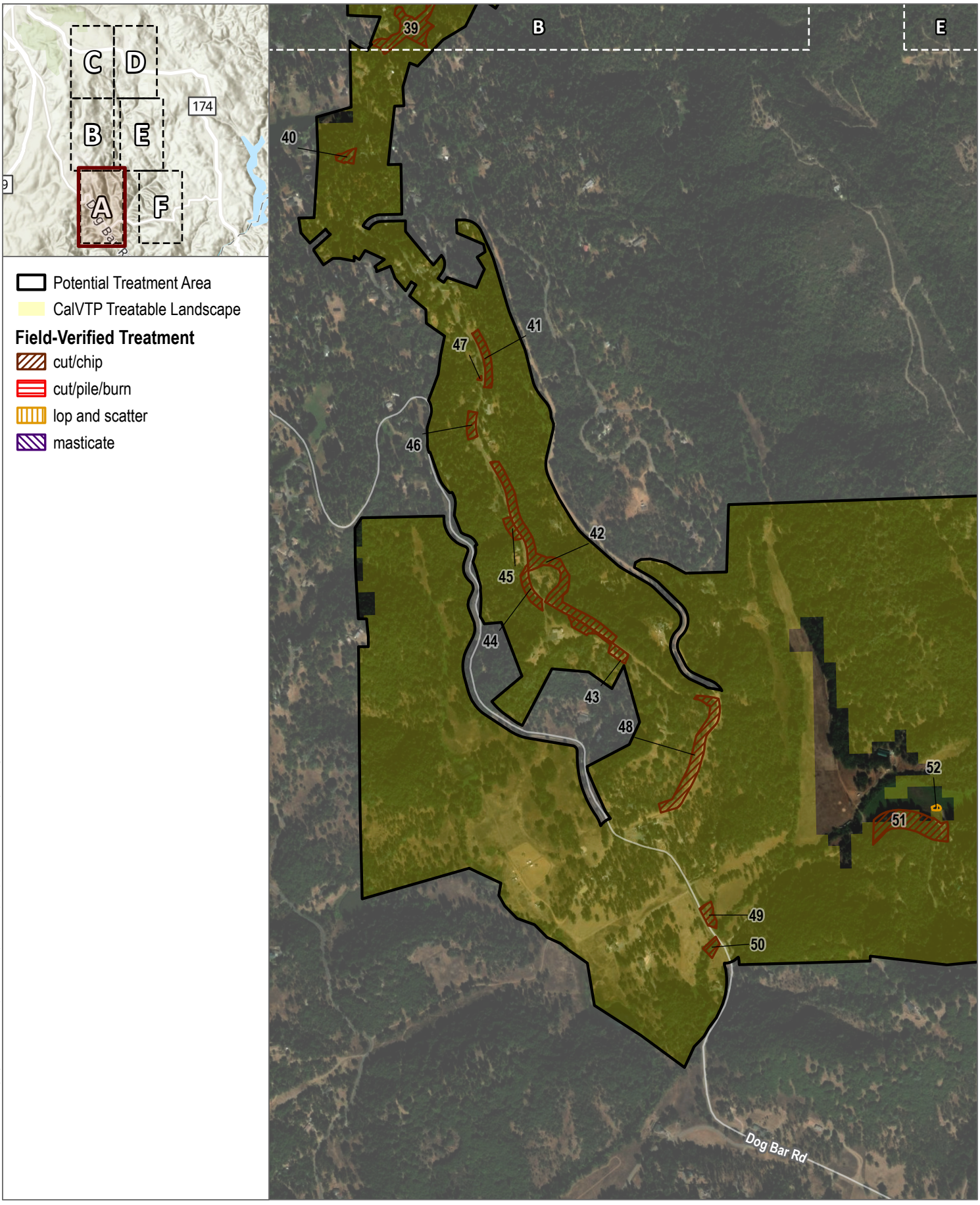
DUDEK

0 1,250 2,500 Feet

FIGURE 4

Proposed Treatments Index Map

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

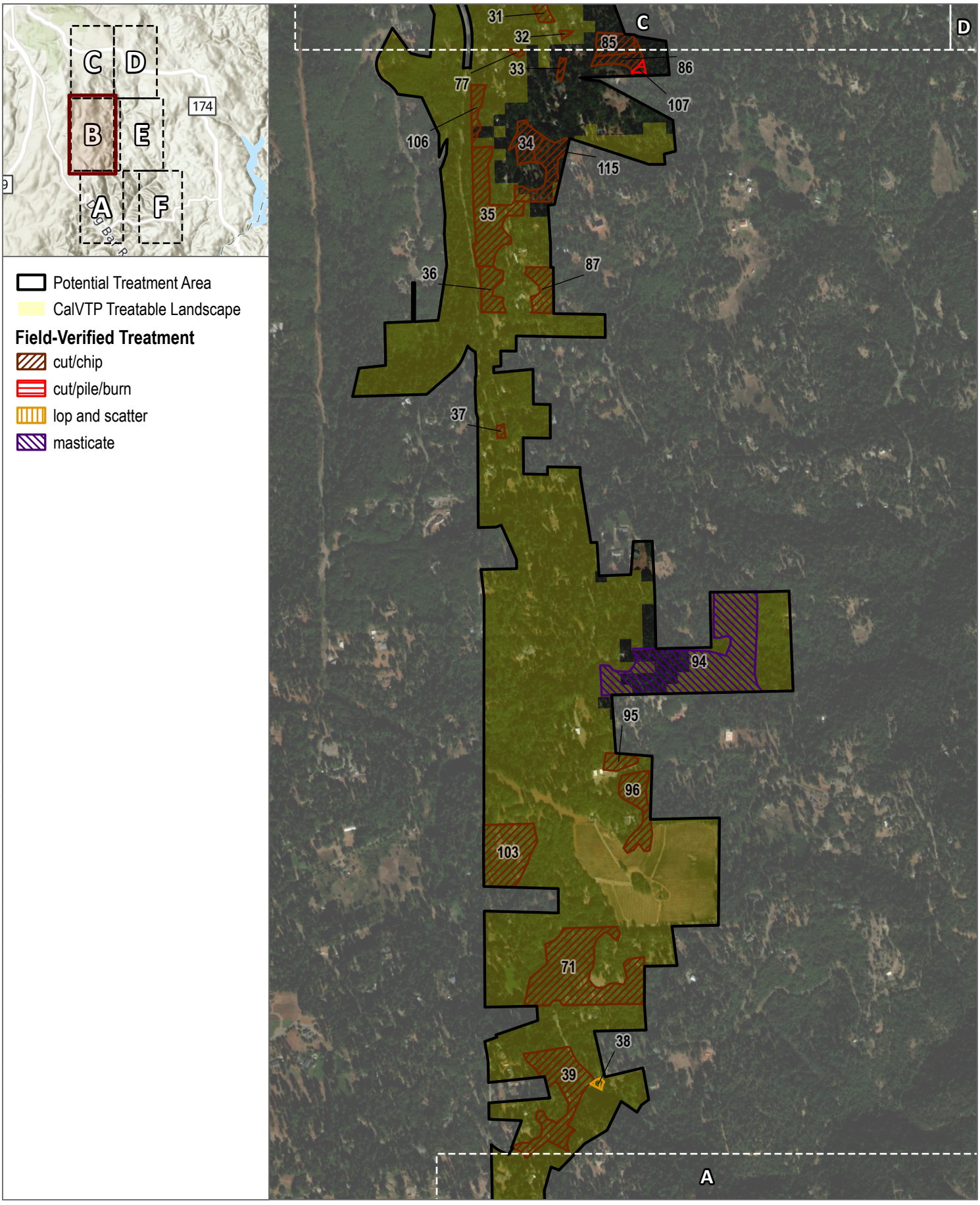
DUDEK

0 500 1,000 Feet

FIGURE 4A

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

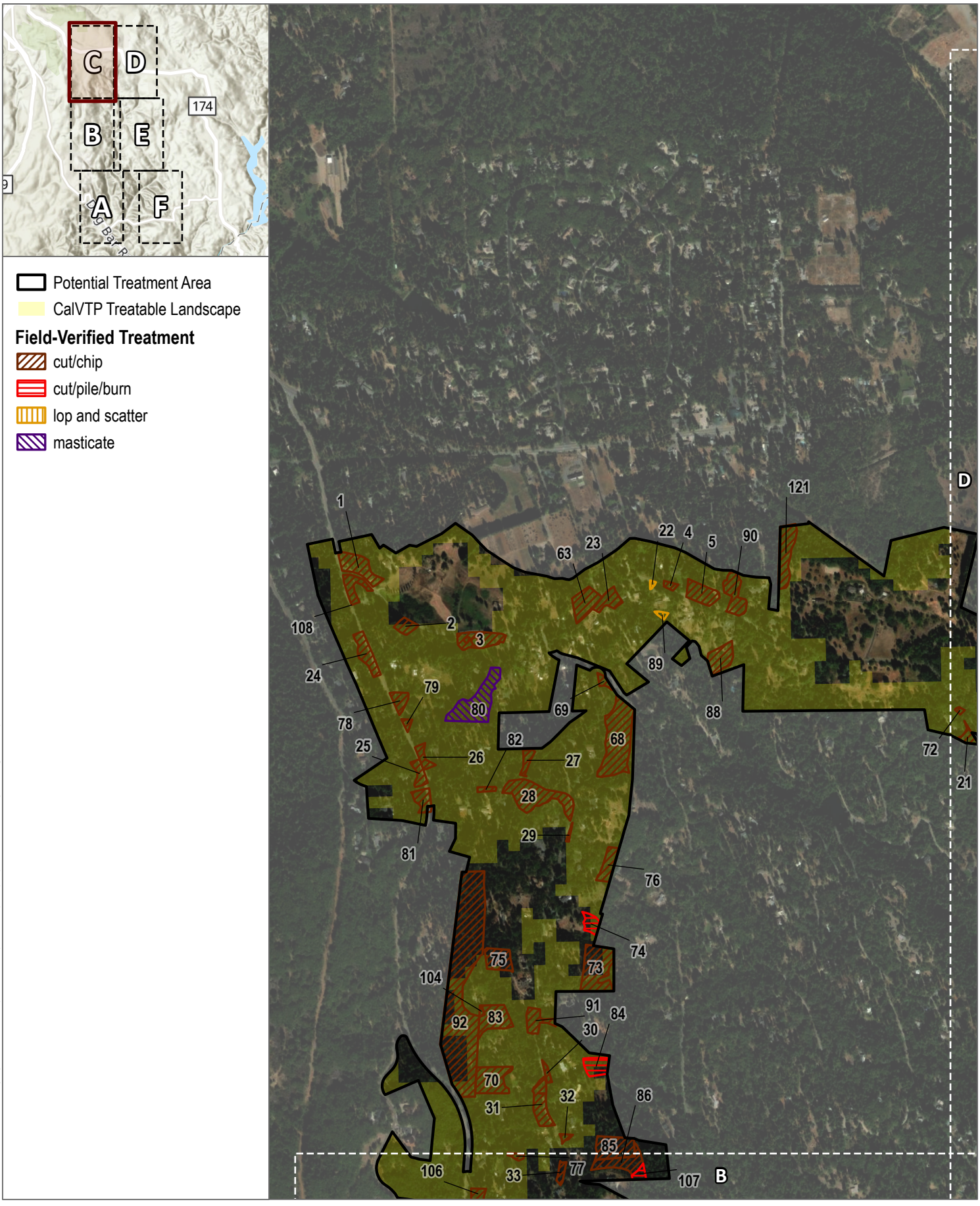
DUDEK

0 500 1,000 Feet

FIGURE 4B

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

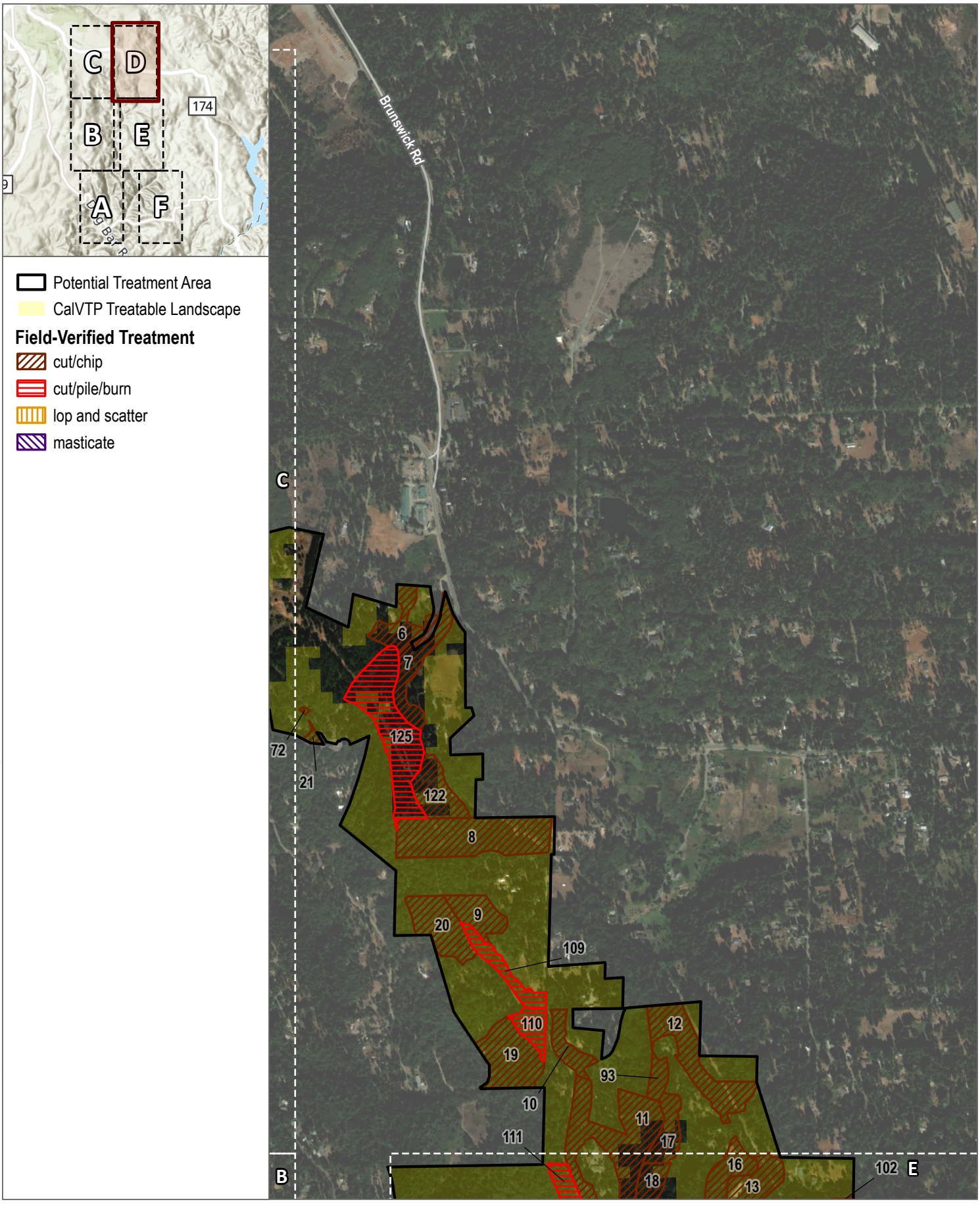
DUDEK

0 500 1,000 Feet

FIGURE 4C

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

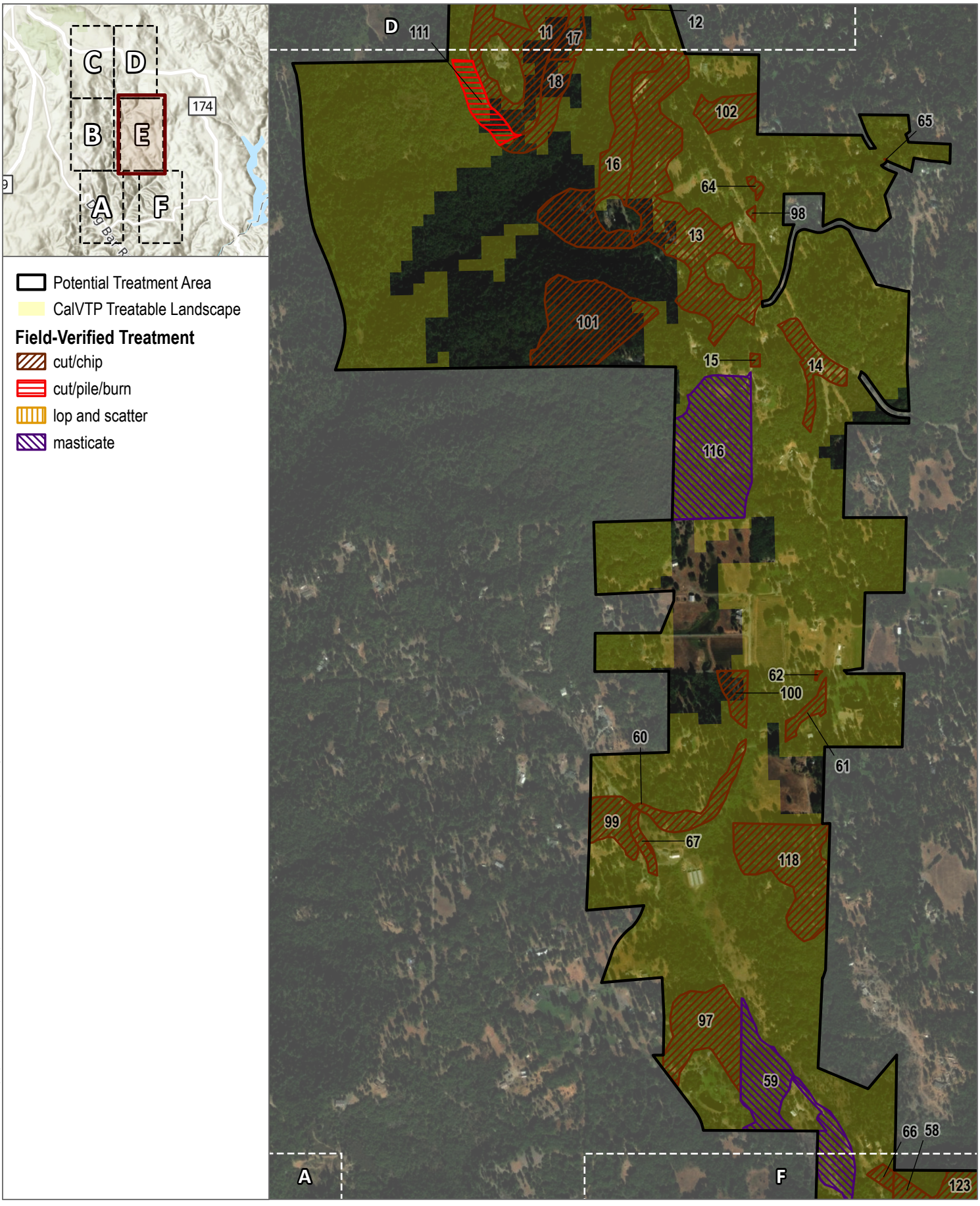
DUDEK

0 500 1,000 Feet

FIGURE 4D

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

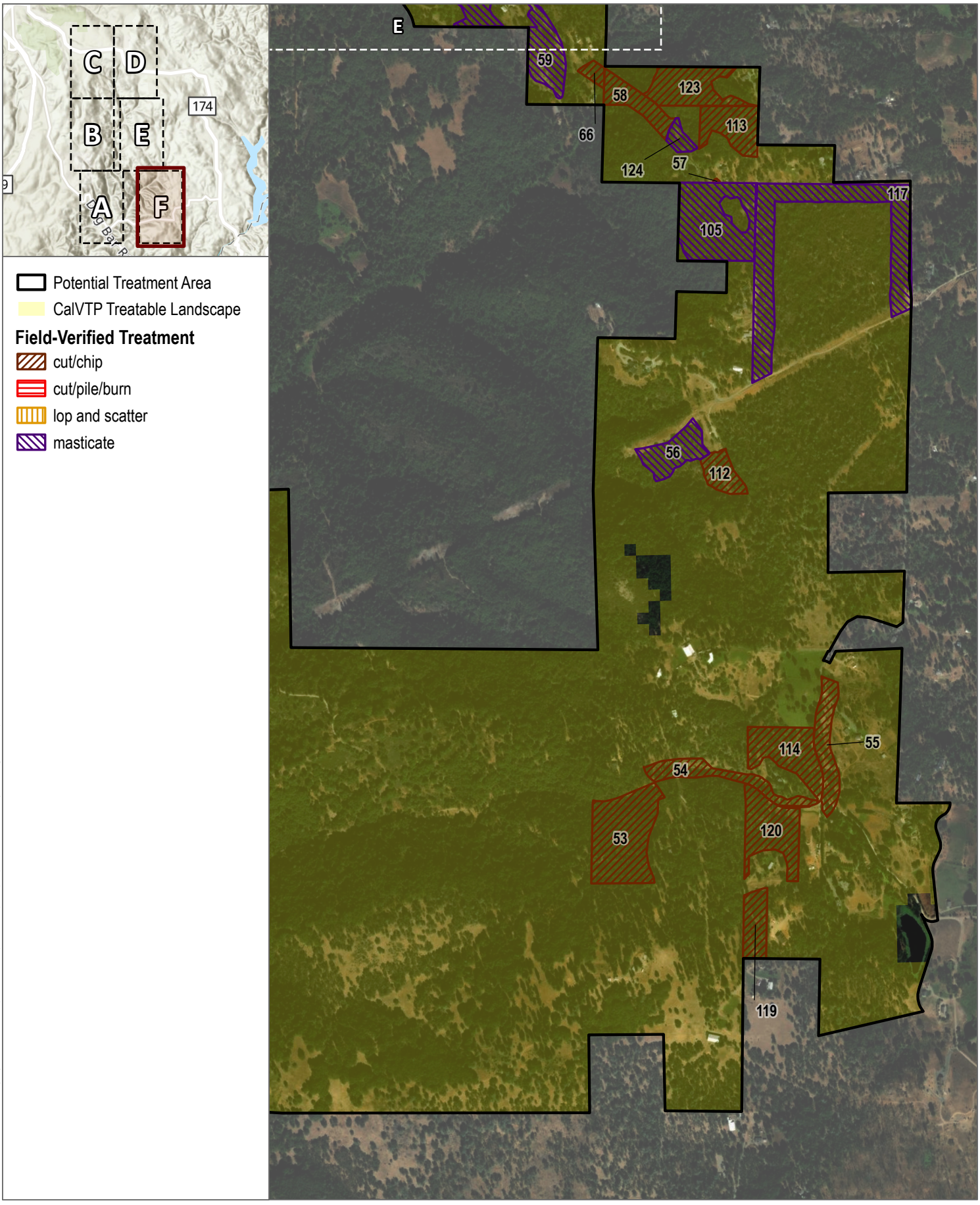
DUDEK

0 500 1,000 Feet

FIGURE 4E

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I



SOURCE: Maxar 9/23/2023

DUDEK

0 500 1,000 Feet

FIGURE 4F

Proposed Treatments Insets

Woodpecker Ravine Shaded Fuel Break Phase I

Attachment B

Photo Log



Photo 1. View facing east at a perennial pond in the western portion of the BSA (May 24, 2024).



Photo 2. View facing south at a canal in the northwestern portion of the BSA (May 24, 2024).



Photo 3. View facing east at an intermittent drainage in the southern portion of the BSA (April 30, 2024).



Photo 4. View facing south at a perennial ditch in the northwestern portion of the BSA (May 24, 2024).



Photo 5. View facing east at a road ditch in the northeastern portion of the BSA (April 30, 2024).



Photo 6. View facing southeast at willow riparian in the mid-eastern portion of the BSA (May 24, 2024).

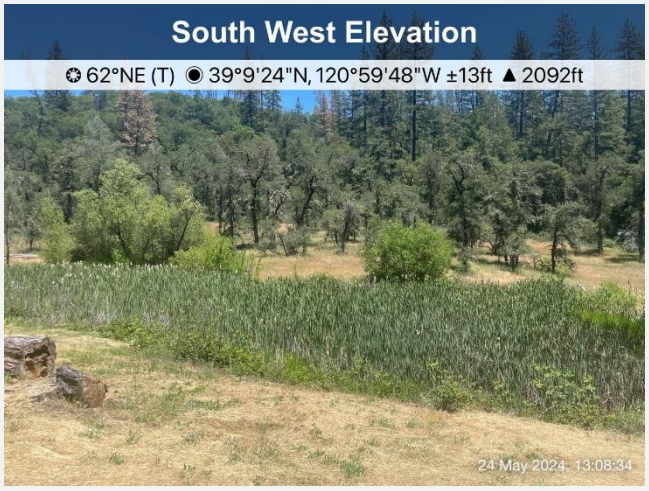


Photo 7. View facing northeast at a cattail marsh in the southeastern portion of the BSA (May 24, 2024).



Photo 8. View facing southwest at an oak woodland and a seasonal wetland in the southern portion of the BSA (April 30, 2024).



Photo 9. View facing east at an oak woodland in the southern portion of the BSA (April 30, 2024).



Photo 10. View facing north-northeast at a canyon live oak and gray pine woodland in the southern portion of the BSA (April 30, 2024).

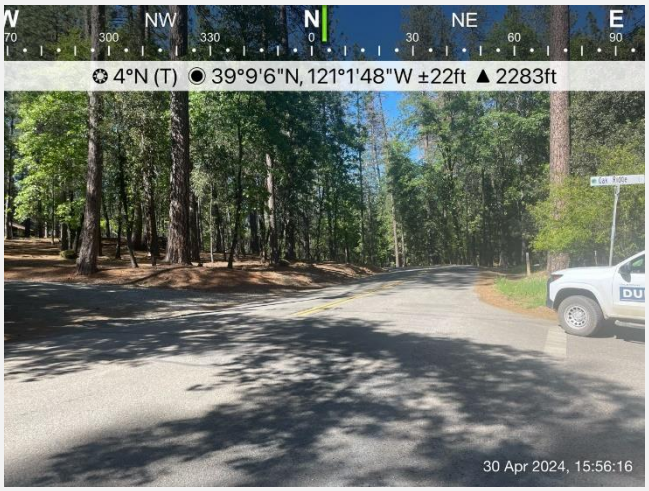


Photo 11. View facing north at a mixed coniferous woodland in the southwestern portion of the BSA (April 30, 2024).



Photo 12. View facing north at a pasture in the southern portion of the BSA (April 30, 2024).



Photo 13. View facing east at an opening with manzanita in the northeastern portion of the BSA (April 30, 2024).



Photo 14. View facing east at a vineyard in the mid-eastern portion of the BSA (May 24, 2024).



Photo 15. View facing southeast at nesting habitat for ground nesting birds in the western portion of the BSA (May 24, 2024).

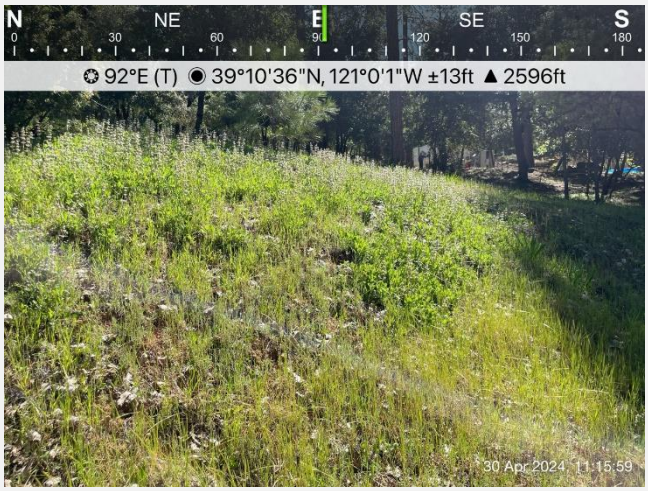


Photo 16. View facing east at bumble bee habitat in the northeastern portion of the BSA (April 30, 2024).

Attachment C
Summary Tables

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																				
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
012-010-004						0.52					0.34															**0.86**
012-010-010					3.46	3.09							2.24													**8.79**
012-010-011					0.54	5.74							0.02											2.89		**9.19**
012-010-032						3.77							0.65				1.31						3.84			**9.56**
012-010-035					0.31	0.11					0.06															**0.48**
012-010-039						2.90											0.00									**2.90**
012-010-047						0.47					0.64															**1.11**
012-010-063					0.54	10.77					3.69		0.39										0.05			**15.44**
012-010-064														1.44	0.24		0.79									**2.47**
012-010-065													0.02		0.00		2.58									**2.60**
012-010-072					2.70					1.79	7.67															**12.16**
012-010-073					3.71	1.99					3.88															**9.57**
012-020-017						2.30				0.08	0.41															**2.79**
012-020-018						2.09				0.19																**2.28**
012-020-019						0.79				0.12																**0.90**
012-020-021						1.56																		0.88		**2.44**
012-020-022										0.90														0.85		**1.75**
012-020-034										1.91																**1.91**
012-020-035										0.21																**0.21**
012-020-044						0.89				0.20																**1.09**
012-020-045						0.96				0.04																**1.00**
012-020-056	0.39									2.84	0.63															**3.86**
012-030-001										0.38																**0.38**
012-030-002										0.99			0.11											2.35		**3.45**
012-030-003																								1.49		**1.49**
012-030-004										0.13														1.18		**1.31**
012-030-006										0.79	0.60															**1.39**
012-030-007	0.48									1.01	0.07															**1.56**
012-030-008	0.93									0.67																**1.60**
012-030-009	1.68	0.09								0.11																**1.88**
012-030-011																								1.07		**1.07**
012-030-012						0.00							0.36											0.76		**1.12**
012-030-013						1.02							0.17											0.13		**1.32**
012-030-014						1.10							0.12													**1.22**
012-030-034													1.80											1.13		**2.93**
012-030-036						2.50							0.27											0.03		**2.80**
012-030-040						2.58							0.70													**3.27**
012-040-050														1.82	0.20											**2.02**
012-040-056														0.00	4.14								2.13			**6.28**
012-040-065	1.86					1.09									0.13		0.00						0.22			**3.30**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
012-040-096															1.46								1.08			**2.54**
012-040-097														0.24	3.15								7.02			**10.41**
012-060-010											0.22											0.67		4.94		**5.82**
012-060-016											2.35													0.72		**3.07**
012-060-017											4.31															**4.31**
012-060-019											0.58											0.84				**1.43**
012-060-020																						0.98				**0.98**
012-060-021																						3.56		0.05		**3.61**
012-060-037											1.31													1.59		**2.89**
012-060-056											0.90															**0.90**
012-060-060											1.81											0.17				**1.98**
012-060-064											0.79													0.24		**1.03**
012-060-066											0.94															**0.94**
012-060-067											0.86															**0.86**
012-060-068											0.32													2.57		**2.89**
012-060-072											2.01															**2.01**
012-060-073											1.01															**1.01**
012-060-074											1.00															**1.00**
012-060-081											0.87													0.00		**0.87**
012-060-082											0.21													0.96		**1.17**
012-070-001		0.05																				4.81				**4.86**
012-070-002																						0.12		0.65		**0.77**
012-070-008		1.92																						0.94		**2.87**
012-070-009		2.52																						1.22		**3.74**
012-070-017		0.76																								**0.76**
012-070-018		0.19																								**0.19**
012-070-019		0.66																								**0.66**
012-070-020		0.28																								**0.28**
012-070-030		1.50																						1.10		**2.60**
012-070-032		0.51																				0.43				**0.94**
012-070-033		1.20																								**1.20**
012-070-034		1.73																								**1.73**
012-070-038		0.77		0.29																		0.04				**1.10**
012-070-039		0.92																								**0.92**
012-070-040		0.82																								**0.82**
012-070-041		0.05																				2.82				**2.87**
012-070-042		1.79																				1.99				**3.78**
012-070-044		0.90																				0.01		1.08		**1.99**
012-070-045		1.38																						1.17		**2.55**
012-080-007															4.28									1.36		**5.64**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
012-080-008															1.73											**1.73**
012-080-011														2.90	0.87											**3.78**
012-080-017															1.42											**1.42**
012-080-018															0.96								2.44			**3.39**
012-080-019															0.69											**0.69**
012-080-020															0.43								1.28			**1.71**
012-080-021															0.73											**0.73**
012-080-022															0.42								1.27			**1.68**
012-080-026															3.12								2.93			**6.05**
012-080-031															0.68								0.35			**1.03**
012-080-034															1.03								2.76	0.42		**4.20**
012-080-047															3.22											**3.22**
012-080-048															3.17											**3.17**
012-080-053														0.02	3.34											**3.36**
012-080-057														0.25	2.48											**2.74**
012-080-058															1.93								5.15			**7.08**
012-080-059															6.45											**6.45**
012-080-060															5.87											**5.87**
012-080-061															4.53											**4.53**
012-080-067															1.84											**1.84**
012-080-068															1.89											**1.89**
012-080-069															0.82								2.12			**2.94**
012-080-070															0.75								2.19			**2.94**
012-080-071															4.58											**4.58**
012-080-072														1.23	3.07						0.21					**4.51**
012-080-078															3.04											**3.04**
012-080-079															3.50											**3.50**
012-091-001		0.21		0.55																				0.14		**0.90**
012-091-002		0.45	0.39	0.05																				0.92		**1.82**
012-091-003				0.03																				0.54		**0.57**
012-091-004			0.03	0.17																				1.81		**2.01**
012-091-005			0.14																					4.01		**4.15**
012-091-006		0.79	0.29																					0.00		**1.08**
012-091-007			5.19																					0.85		**6.04**
012-091-008																								3.17		**3.17**
012-091-009																								1.64		**1.64**
012-091-012		0.13	0.02																					2.96		**3.11**
012-091-013		0.85																								**0.85**
012-091-014		0.87																						0.03		**0.90**
012-091-016		1.86																						2.74		**4.60**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
012-091-071		1.24																						6.27		**7.51**
012-100-003		0.15		4.18																				0.48		**4.81**
012-100-004		0.31		0.57																						**0.89**
012-100-011		0.35	0.05																							**0.40**
012-100-014		0.41	0.43	1.88																						**2.71**
012-100-016		0.33		0.19																						**0.52**
012-100-019																								2.81		**2.81**
012-100-022				0.36																				3.25		**3.61**
012-100-023				1.16																				0.84		**2.00**
012-120-002															5.16											**5.16**
012-120-003													5.90		18.48											**24.38**
012-120-011													68.23	6.74	38.73						0.89					**114.59**
012-210-011															1.17									4.23		**5.40**
012-210-049															0.06									2.44		**2.50**
012-222-004																								2.72		**2.72**
012-222-006																								1.73		**1.73**
012-600-001													0.03				0.03						0.14			**0.20**
012-600-002													0.53				0.23									**0.76**
012-600-003													1.83													**1.83**
012-600-036													2.73	4.92	0.60		0.12									**8.37**
012-860-001													4.28		5.33									1.20		**10.81**
012-860-002																								4.89		**4.89**
012-860-003															1.22									8.50		**9.72**
012-860-008																								5.02		**5.02**
012-860-009																								4.79		**4.79**
012-860-010													0.03											5.18		**5.21**
012-860-011																								1.12		**1.12**
012-860-012																								1.86		**1.86**
012-860-013																								1.51		**1.51**
012-860-014																								1.10		**1.10**
012-860-018													1.65											4.43		**6.09**
012-860-019																								1.18		**1.18**
012-860-020																								1.20		**1.20**
012-860-021																								1.67		**1.67**
012-870-001													4.87		7.81											**12.68**
012-870-002													1.54											3.46		**5.00**
012-870-004													0.02											1.48		**1.50**
012-870-007													1.55											0.32		**1.87**
012-870-008													1.98													**1.98**
012-870-009													1.91													**1.91**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
012-870-011													2.06		8.00											**10.06**
012-870-012													0.85		2.20											**3.04**
012-870-013													4.17		0.31											**4.48**
012-870-019													1.15											1.16		**2.31**
012-870-020													2.97											0.01		**2.98**
012-870-022													6.19		0.16											**6.35**
012-870-023													5.04		0.88											**5.92**
012-870-024													3.19		1.81											**5.00**
012-870-025													4.66													**4.66**
012-880-001											1.81															**1.81**
012-880-004											1.88															**1.88**
012-880-005											2.62													0.15		**2.77**
012-880-006											0.09													5.64		**5.73**
012-880-009											0.20													1.02		**1.22**
012-880-010											0.37													1.30		**1.67**
012-880-011											4.04															**4.04**
012-880-012											1.18															**1.18**
022-020-019		1.02																								**1.02**
022-020-020		1.02																								**1.02**
022-020-021		1.02																								**1.02**
022-020-022		1.15																								**1.15**
022-020-023		1.19																								**1.19**
022-020-024		1.05																								**1.05**
022-020-026	0.70	0.83																								**1.53**
022-020-027	0.40	1.51																								**1.91**
022-020-028	1.25	6.23																								**7.48**
022-020-029	2.15	1.60																								**3.75**
022-210-003	0.42	0.35									0.53															**1.31**
022-210-004	3.62	0.03								0.62	5.22															**9.49**
022-210-005	1.08									0.83	2.96															**4.87**
022-210-018	0.01	1.42																								**1.43**
022-230-064				9.66																		1.19				**10.85**
022-230-081		0.24		0.19							2.62											9.06				**12.10**
022-241-042				3.66																						**3.66**
022-241-051				3.24																				13.58		**16.82**
022-241-054				0.25																				1.06		**1.31**
022-690-006		1.01																								**1.01**
022-690-009		1.16		0.02																						**1.18**
022-690-010		1.01																								**1.01**
022-690-011		1.00																								**1.00**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
022-690-012		1.00																								1.00
022-690-013		1.01																								1.01
022-690-014		1.02																								1.02
022-690-015		1.06																								1.06
022-690-016		1.03																								1.03
022-690-017		1.14																								1.14
022-690-025		1.34		0.26																						1.60
022-690-030		0.40		1.41																						1.81
022-690-031		4.48																								4.48
022-690-032		3.29																								3.29
022-690-033		1.38									0.69															2.07
022-690-034		1.75									0.27															2.02
022-690-035		0.02									2.74															2.76
023-140-023				2.97																						2.97
023-140-025				2.73																						2.73
023-160-010			0.89																							0.89
023-160-013			0.72																					0.14		0.86
023-160-014			0.38																					0.55		0.93
023-590-022	0.47	0.01	1.12																				1.38			2.98
023-590-024			2.65																							2.65
026-010-001		0.01	0.27																							0.28
026-010-002			3.06	0.30																						3.36
026-010-011			0.42																							0.42
026-010-012			0.48																							0.48
026-010-013			0.46																							0.46
026-010-014			0.90																							0.90
026-010-015			0.47																							0.47
026-010-016			0.38	1.51																						1.89
026-010-018			3.91	4.10																						8.02
026-010-026			1.53																							1.53
026-030-006				20.66									0.12													20.78
026-030-008			3.41	1.73																						5.15
026-030-009				1.21																						1.21
026-030-010			1.76	16.93																				2.50		21.18
026-030-015			2.54	0.41																						2.95
026-030-016			0.40	3.13																						3.53
026-070-033				2.15																				0.51		2.67
026-070-034				1.84																				0.83		2.67
026-070-035				1.64																				1.03		2.67
026-070-036				1.02																				1.64		2.66

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
026-070-052				24.16																				0.40		**24.56**
026-070-053				7.77																						**7.77**
026-070-057				0.14																				1.86		**2.00**
026-070-059	0.98			9.85																				1.60		**12.43**
026-070-060				13.88																						**13.88**
026-070-061				10.77																				0.00		**10.78**
026-070-062				8.37																				3.21		**11.59**
026-090-006							3.06		17.90									0.40								**21.35**
026-090-007							0.98																			**0.98**
026-090-009							0.79																			**0.79**
026-090-011								1.20	42.87				15.15								6.57			3.25		**69.03**
026-090-021							0.84		8.07																	**8.91**
026-090-022							0.16		10.08																	**10.24**
026-090-040							1.69		16.61																	**18.30**
026-100-002																								3.61		**3.61**
026-100-006																								2.00		**2.00**
026-100-011		0.54	0.00	0.66																						**1.20**
026-100-012				1.02																						**1.02**
026-100-016																							0.58	1.69		**2.27**
026-100-018		0.65		0.47																						**1.12**
026-100-021				0.64																				2.36		**3.00**
026-100-028				0.96																				1.53		**2.50**
026-100-031																								1.62		**1.62**
026-100-033			1.27	0.26																				2.27		**3.80**
026-100-034			0.99																					1.72		**2.70**
026-100-037		0.29		2.59																						**2.89**
026-110-001		1.89																					0.04			**1.93**
026-110-002		0.63	0.77																							**1.41**
026-110-003		0.45	0.51	0.00																						**0.96**
026-110-029		0.55																					0.36			**0.91**
026-110-030			0.39																				0.51			**0.90**
026-110-031			0.06																				0.83			**0.89**
026-110-033			0.73																				1.32			**2.05**
026-110-036			0.76																				1.19			**1.95**
026-120-002													1.41											2.67		**4.08**
026-120-003													0.89											2.51		**3.41**
026-120-005													4.01													**4.01**
026-120-006													7.27	0.06												**7.33**
026-120-012													3.51											0.47		**3.98**
026-130-003													6.58					0.87								**7.45**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
026-130-007													7.67					0.56								**8.24**
026-130-008													5.67					0.93								**6.60**
026-130-009													1.58					1.53								**3.11**
026-130-010													1.89					4.04								**5.93**
026-130-011													1.40					2.22								**3.63**
026-130-012							0.07						0.50					1.29								**1.85**
026-130-017													5.00													**5.00**
026-130-019													51.14			25.17	10.41	11.26							3.63	**101.61**
026-130-020																2.34		9.41								**11.75**
026-140-001									0.58									1.20								**1.78**
026-150-013									0.60				6.16			4.41		3.90								**15.07**
026-150-014													2.33					7.85								**10.18**
026-280-003				0.25									5.58	1.29										0.50		**7.62**
026-280-005													2.39	2.74												**5.14**
026-290-002													2.06	3.36												**5.41**
026-290-006													1.61	3.61												**5.22**
026-300-003													2.56	3.36												**5.92**
026-300-006													9.23													**9.23**
026-300-007													2.04	3.25												**5.30**
026-300-008													6.64	0.16												**6.80**
026-310-006													0.25											0.20		**0.45**
026-310-007																								0.37		**0.37**
026-310-009																								0.28		**0.28**
026-310-011																								0.29		**0.29**
026-310-013																							0.40	0.58		**0.97**
026-310-014			0.35																				0.01			**0.36**
026-310-015																								0.36		**0.36**
026-310-016																								0.53		**0.53**
026-310-018																								0.43		**0.43**
026-320-001													0.73													**0.73**
026-320-002													0.50													**0.50**
026-320-003													0.65													**0.65**
026-320-004													0.61											0.06		**0.67**
026-320-005													0.28											0.68		**0.96**
026-320-006													0.02											0.40		**0.41**
026-320-007																								0.42		**0.42**
026-320-015																								0.31		**0.31**
026-320-017																								0.33		**0.33**
026-510-001							15.82	2.86	1.62				11.07		15.72				2.30					9.95		**59.34**
026-510-002							3.08						4.37		0.41											**7.87**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
026-510-003							13.32						9.56		2.46			1.18								**26.52**
026-510-004							5.31		14.29			16.38	57.17	5.26	45.88				28.01					0.18		**172.48**
026-510-005												0.35			0.02											**0.37**
028-010-002													2.36													**2.36**
028-010-014				3.71								12.21	3.72													**19.63**
028-010-015												5.02														**5.02**
028-010-016												5.00														**5.00**
028-010-017	1.59											3.41														**5.00**
028-010-024				10.36								0.39			8.86											**19.62**
028-010-027				3.40											16.12											**19.52**
028-010-033													2.54													**2.54**
028-010-036													0.42		6.11											**6.52**
028-010-037												0.19	4.53		1.07											**5.79**
028-010-038				0.04								1.28	0.44		4.29											**6.05**
028-010-039				3.03								1.90	0.41		0.10											**5.44**
028-010-042				4.12								0.92														**5.04**
028-010-043				8.02								0.33												1.65		**10.00**
028-020-002	1.75			7.97								0.63												0.42		**10.77**
028-020-003				0.00								3.86														**3.86**
028-020-004												1.62														**1.62**
028-020-005	2.10		3.27	3.32								0.91														**9.59**
028-020-013	0.67											2.24														**2.91**
028-020-014												0.85														**0.85**
028-020-015	0.71	0.63		7.05								3.33														**11.71**
028-020-017																		0.11						0.21		**0.31**
028-020-023													1.66					0.38					0.00	5.53		**7.58**
028-020-025	0.59											0.11	4.72													**5.42**
028-020-039	7.49			2.40									2.01					0.32						6.09		**18.31**
028-020-040		5.58		3.75																0.12				15.61		**25.06**
028-020-051																		2.58						6.35		**8.93**
028-020-052	1.75			1.61								0.01												3.78		**7.15**
028-230-035								1.85							0.24									10.55		**12.64**
028-230-036								0.59							0.27								0.13	6.61		**7.60**
028-230-038																					0.37		3.94	0.63		**4.94**
028-230-039		0.74													5.36									4.02		**10.12**
028-230-042												0.72			3.37					0.96						**5.05**
028-230-043												1.89			2.14					1.02						**5.05**
028-230-046																				0.36				8.85		**9.21**
028-230-049													10.20							2.77				4.49		**17.46**
028-230-054													3.62		0.07					6.20				1.75		**11.64**

Table 1. Soils Present in the BSA by Parcel

	Hydric Soils				Non-Hydric Soils																			
APN	Ao	SlB	SlC	SlD	AfC	AgD	BoC	BrD	BrE	CmB	CoD	JoC	JrE2	JrF2	JsE	MaD	McF2	MkE	MmE2	RrE	ScE	SfC	SmC	SmE	W	Total
028-230-055															2.39					4.42				0.27		**7.09**
028-240-003								6.14							2.74									1.24		**10.13**
028-240-004								3.06													48.97		29.93	0.36		**82.33**
028-240-006													19.20	0.03	5.14						12.55		3.37			**40.28**
028-240-011								1.53																		**1.53**
028-240-012								1.15							1.39						0.35					**2.89**
028-240-013								0.24							1.58						1.25					**3.07**
028-250-006													64.11						12.69				5.44			**82.24**
028-250-008													0.19						5.69					2.37		**8.26**
028-250-009													0.02						0.23							**0.25**
028-250-010								61.74					54.06								31.48		5.44	1.49		**154.21**
028-250-017													27.93	0.91					4.57		1.27		0.90	3.32		**38.89**
028-250-025													0.34								5.33		4.88			**10.55**
028-250-026													1.47								7.39		6.81	1.32		**16.98**
028-250-033			0.15	0.51									17.28						9.77		0.07				1.95	**29.73**
028-250-035								0.08					13.74													**13.82**
028-250-039													17.11	8.64					9.35							**35.10**
028-250-041													4.77						5.70							**10.47**
028-250-042								7.29					13.47						0.06		11.91		4.70	21.93		**59.36**
028-250-045													7.99						0.97		0.27			0.45		**9.67**
028-250-046													7.53						0.96		1.24					**9.74**
028-250-047																			0.28		0.82		4.41	10.25		**15.76**
028-250-048																					3.97			0.01		**3.98**
028-270-049				1.29															1.67				0.03	8.53		**11.52**
ROW	3.23	7.12	2.00	1.45	1.33	1.73	4.79		2.43	1.12	1.98	1.01	16.66	2.38	11.40		1.00	5.67	1.22		0.18	0.40	0.65	9.17		**76.93**
Total	**36.30**	**86.82**	**43.54**	**234.27**	**12.58**	**47.97**	**49.91**	**87.74**	**115.05**	**14.92**	**66.67**	**64.57**	**676.28**	**54.61**	**305.23**	**31.92**	**16.47**	**55.69**	**83.48**	**15.85**	**135.07**	**27.09**	**112.19**	**341.27**	**5.58**	**2721.05**

Notes:
AfC = Aiken loam, 9 to 15 percent slopes, high precip.
AgD = Aiken cobbly loam, 2 to 30 percent slopes
Ao = Alluvial land, clayey
BoC = Boomer loam, 5 to 15 percent slopes
BrD = Boomer, hard bedrock - Rock outcrop complex, 5 to 30 percent slopes
BrE= Boomer, hard bedrock - Rock outcrop complex, 15 to 60 percent slopes
CmB = Cohasset loam, summits, 2 to 15 percent slopes
CoD = Cohasset cobbly loam, 5 to 30 percent slopes
JoC = Josephine loam, 9 to 15 percent slopes
JrE2 = Josephine-Mariposa complex, 15 to 50 percent slopes, eroded
JrF2 = Mariposa-Josephine complex, 50 to 75 percent slopes, eroded
JsE = Josephine rock-Outcrop complex, 15 to 50 percent slopes
MaD = Mariposa gravelly loam, 2 to 30 percent slopes
McF2 = Mariposa-Maymen complex, 50 to 75 percent slopes, eroded
MkE Mariposa-Rock outcrop complex, 2 to 50 percent slopes
MmE2 = Maymen-Mariposa complex, 2 to 50 percent slopes, eroded
RrE = Rock outcrop-Dubakella complex, 5 to 50 percent slopes
ScE = Secca-Rock outcrop complex, 2 to 50 percent slopes
SfC = Sierra sandy loam, deep, 9 to 15 percent slopes, LRU 18XI
SlB = Sites silt loam, 2 to 9 percent slopes, N low montane
SlC = Sites silt loam, 9 to 15 percent slopes, N low montane
SlD = Sites silt loam, 15 to 30 percent slopes, N low montane
SmC = Sites very stony loam, 2 to 15 percent slopes
SmE = Sites very stony loam, 15 to 50 percent slopes
W = Water

Table 2. NHD, NWI, and FEMA Resources Mapped by Parcel in the BSA

APN/Parcel Type	Aquatic Resources Mapped in the BSA		
	FEMA (acres)	NHD (linear feet)	NWI (acres)
012-010-047			0.002
012-010-064		314.4	0.142
012-010-065		462.0	0.211
012-010-072		167.1	0.051
012-020-018			0.002
012-020-021		214.0	0.074
012-020-045		152.1	0.033
012-030-036			0.006
012-030-040		345.9	0.154
012-040-065		577.1	0.389
012-060-017		272.1	0.082
012-060-056		187.8	0.056
012-070-034		246.2	0.075
012-070-039		309.6	0.094
012-070-041		47.9	0.015
012-070-042		320.6	0.097
012-080-007		434.5	0.198
012-080-008		349.3	0.159
012-080-078		208.5	0.095
012-080-079		293.6	0.134
012-091-001		117.3	0.036
012-091-002		40.4	0.011
012-091-003		143.7	0.044
012-091-004		232.2	0.070
012-091-005		2.4	0.002
012-120-003		1,293.2	0.588
012-120-011		4,033.4	2.065
012-600-036		955.9	0.435
012-860-003			0.441
012-870-013		396.7	0.339
012-870-022		255.7	0.153
012-870-023		22.6	0.014
012-870-025		432.1	0.271
012-880-001		254.4	0.074
012-880-004		41.9	0.017
012-880-005		80.5	0.026
012-880-011			0.003
012-880-012		290.0	0.087
022-020-019		212.9	0.096
022-020-020		207.7	0.094

Table 2. NHD, NWI, and FEMA Resources Mapped by Parcel in the BSA

APN/Parcel Type	Aquatic Resources Mapped in the BSA		
	FEMA (acres)	NHD (linear feet)	NWI (acres)
022-020-021		207.6	0.095
022-020-022		222.2	0.099
022-020-023		223.8	0.095
022-020-024		207.5	0.095
022-230-081		402.6	0.121
022-241-051		1,970.6	1.016
022-241-054		431.5	0.131
022-690-006		212.0	0.097
022-690-012		9.5	0.005
022-690-013		237.8	0.108
026-010-018		151.6	0.809
026-030-010			0.232
026-070-059		312.9	0.141
026-090-006	1.1	188.6	0.147
026-090-011		2,069.7	0.936
026-090-022		218.6	0.098
026-100-016		158.0	0.061
026-100-021		196.0	0.146
026-100-028		172.2	0.078
026-100-033		270.4	0.122
026-100-034		300.6	0.136
026-130-012	0.3		
026-130-019		3,693.2	3.291
026-130-020		215.8	0.108
026-140-001	1.5		0.191
026-150-013	2.5	732.9	1.045
026-150-014	1.7	539.6	0.138
026-280-003		1,099.0	0.498
026-280-005		368.6	0.204
026-290-002		176.9	0.081
026-300-006		750.6	0.613
026-510-001	1.3	2,507.1	1.131
026-510-002	1.7	330.5	0.151
026-510-003	10.9	1,942.4	0.713
026-510-004	3.1	3,732.2	1.782
028-010-014		705.1	0.574
028-010-017		609.5	0.347
028-010-024			0.461
028-010-027			0.082
028-010-036			0.009

Table 2. NHD, NWI, and FEMA Resources Mapped by Parcel in the BSA

APN/Parcel Type	Aquatic Resources Mapped in the BSA		
	FEMA (acres)	NHD (linear feet)	NWI (acres)
028-010-037		840.1	0.633
028-010-038		254.3	0.113
028-010-039		265.1	0.122
028-010-042			0.149
028-010-043			0.158
028-020-002			0.367
028-020-005		634.1	0.400
028-020-015			0.059
028-020-039			0.604
028-020-040			0.025
028-020-052			0.050
028-230-038			0.133
028-230-042		248.0	0.264
028-230-043		358.0	0.197
028-230-046			0.380
028-230-054			0.049
028-230-055			0.557
028-240-006		466.5	0.226
028-250-006		152.7	0.069
028-250-008		395.5	0.163
028-250-010		1,527.4	0.691
028-250-017		460.7	0.252
028-250-026		421.6	0.285
028-250-033		959.8	2.602
028-250-039		490.0	0.212
028-250-041		210.0	0.128
028-250-045		33.8	0.026
028-250-046		198.9	0.060
028-250-047		215.5	0.156
028-250-048		301.7	0.260
028-270-049		172.1	0.089
ROW	2.7	1,331.6	0.919
Total	**26.7**	**49,420.6**	**33.520**

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Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
012-010-004									0.73		0.13			**0.86**
012-010-010				2.41				3.92			2.46			**8.79**
012-010-011				0.32					0.03		8.84			**9.19**
012-010-032				3.08	3.17				0.03		3.28			**9.56**
012-010-035									0.03		0.45			**0.48**
012-010-039					1.03						1.88			**2.90**
012-010-047									1.11					**1.11**
012-010-063				10.09							5.35			**15.44**
012-010-064					1.42				1.05					**2.47**
012-010-065					1.04				1.56					**2.60**
012-010-072				5.98					2.19		4.00			**12.16**
012-010-073				8.56							0.55		0.46	**9.57**
012-020-017									1.16		1.63			**2.79**
012-020-018											2.28			**2.28**
012-020-019											0.90			**0.90**
012-020-021											2.44			**2.44**
012-020-022											1.75			**1.75**
012-020-034											1.91			**1.91**
012-020-035											0.21			**0.21**
012-020-044											1.09			**1.09**
012-020-045											1.00			**1.00**
012-020-056				0.76							3.10			**3.86**
012-030-001											0.38			**0.38**
012-030-002											3.45			**3.45**
012-030-003											1.49			**1.49**
012-030-004											1.31			**1.31**
012-030-006											1.39			**1.39**
012-030-007											1.56			**1.56**
012-030-008											1.60			**1.60**
012-030-009											1.88			**1.88**
012-030-011											1.07			**1.07**
012-030-012											1.12			**1.12**
012-030-013											1.32			**1.32**
012-030-014											1.22			**1.22**
012-030-034											2.93			**2.93**
012-030-036									0.05		2.75			**2.80**
012-030-040											3.27			**3.27**
012-040-050					1.94						0.08			**2.02**
012-040-056					1.52		0.54	0.39			3.82			**6.28**
012-040-065					0.61			0.21			2.47			**3.30**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
012-040-096					1.29		1.25							**2.54**
012-040-097					3.96		4.71				1.74			**10.41**
012-060-010					1.40				1.56		2.86			**5.82**
012-060-016					0.16			0.19	2.72					**3.07**
012-060-017					3.58				0.12		0.61			**4.31**
012-060-019					1.41						0.02			**1.43**
012-060-020					0.03						0.94			**0.98**
012-060-021					1.44						2.16			**3.61**
012-060-037					1.03			0.62	1.25					**2.89**
012-060-056											0.90			**0.90**
012-060-060					1.55						0.42			**1.98**
012-060-064					0.00			0.06	0.96					**1.03**
012-060-066					0.94									**0.94**
012-060-067					0.86									**0.86**
012-060-068					2.24			0.14	0.14		0.37			**2.89**
012-060-072					2.01									**2.01**
012-060-073					1.01									**1.01**
012-060-074					0.31						0.69			**1.00**
012-060-081									0.87					**0.87**
012-060-082									1.17					**1.17**
012-070-001											4.86			**4.86**
012-070-002											0.77			**0.77**
012-070-008					2.42						0.45			**2.87**
012-070-009					1.66						2.07			**3.74**
012-070-017											0.76			**0.76**
012-070-018											0.19			**0.19**
012-070-019					0.40						0.26			**0.66**
012-070-020					0.22						0.07			**0.28**
012-070-030					0.72				0.14		1.74			**2.60**
012-070-032								0.18			0.76			**0.94**
012-070-033					0.06						1.14			**1.20**
012-070-034											1.73			**1.73**
012-070-038								0.00			1.10			**1.10**
012-070-039											0.92			**0.92**
012-070-040					0.65						0.17			**0.82**
012-070-041											2.87			**2.87**
012-070-042								0.20			3.57			**3.78**
012-070-044									0.02		1.97			**1.99**
012-070-045					0.16				0.55		1.83			**2.55**
012-080-007											5.64			**5.64**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
012-080-008					0.00						1.73			**1.73**
012-080-011											3.78			**3.78**
012-080-017											1.42			**1.42**
012-080-018											3.39			**3.39**
012-080-019								0.05			0.65			**0.69**
012-080-020											1.71			**1.71**
012-080-021								0.24			0.49			**0.73**
012-080-022											1.68			**1.68**
012-080-026								2.00			4.05			**6.05**
012-080-031											1.03			**1.03**
012-080-034									0.59		3.62			**4.20**
012-080-047								1.78			1.44			**3.22**
012-080-048								0.10			3.08			**3.17**
012-080-053											3.36			**3.36**
012-080-057					0.01						2.73			**2.74**
012-080-058											7.08			**7.08**
012-080-059											6.45			**6.45**
012-080-060					0.37						5.50			**5.87**
012-080-061					0.73						3.80			**4.53**
012-080-067								1.19			0.65			**1.84**
012-080-068								1.59			0.30			**1.89**
012-080-069											2.94			**2.94**
012-080-070								1.57			1.36			**2.94**
012-080-071								0.31	0.55		3.72			**4.58**
012-080-072								0.64			3.86			**4.51**
012-080-078											3.04			**3.04**
012-080-079					1.42						2.08			**3.50**
012-091-001											0.90			**0.90**
012-091-002					1.21						0.61			**1.82**
012-091-003					0.04						0.52			**0.57**
012-091-004					0.97						1.04			**2.01**
012-091-005					1.08			0.31			2.76			**4.15**
012-091-006					1.08									**1.08**
012-091-007					5.68						0.36			**6.04**
012-091-008								0.12			3.05			**3.17**
012-091-009					0.27						1.37			**1.64**
012-091-012					1.57						1.54			**3.11**
012-091-013					0.85									**0.85**
012-091-014					0.90									**0.90**
012-091-016					4.60									**4.60**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
012-091-071					5.00						2.51			**7.51**
012-100-003								3.44			1.36			**4.81**
012-100-004								0.07			0.81			**0.89**
012-100-011									0.40					**0.40**
012-100-014								1.66	0.59		0.46			**2.71**
012-100-016											0.52			**0.52**
012-100-019								0.55			2.25			**2.81**
012-100-022								1.92			1.69			**3.61**
012-100-023								1.05			0.95			**2.00**
012-120-002					1.85		0.15				3.17			**5.16**
012-120-003					16.99		3.73				3.66			**24.38**
012-120-011					42.97		0.31	3.33	3.82		64.16			**114.59**
012-210-011											5.40			**5.40**
012-210-049											2.50			**2.50**
012-222-004											2.72			**2.72**
012-222-006											1.73			**1.73**
012-600-001									0.06		0.15			**0.20**
012-600-002									0.76		0.00			**0.76**
012-600-003									0.65		1.18			**1.83**
012-600-036					0.76				2.66		4.94			**8.37**
012-860-001					3.94				0.69		6.19			**10.81**
012-860-002									3.01		1.88			**4.89**
012-860-003									5.31		4.40			**9.72**
012-860-008									2.67		2.35			**5.02**
012-860-009					0.03				0.04		4.71			**4.79**
012-860-010					0.03				0.61		4.57			**5.21**
012-860-011									0.01		1.11			**1.12**
012-860-012											1.86			**1.86**
012-860-013											1.51			**1.51**
012-860-014											1.10			**1.10**
012-860-018									1.03		5.05			**6.09**
012-860-019									0.78		0.41			**1.18**
012-860-020									0.01		1.18			**1.20**
012-860-021											1.67			**1.67**
012-870-001					10.60				1.31		0.77			**12.68**
012-870-002					0.04				2.77		2.19			**5.00**
012-870-004									0.02		1.48			**1.50**
012-870-007									1.60		0.27			**1.87**
012-870-008									1.08		0.91			**1.98**
012-870-009									0.89		1.02			**1.91**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
012-870-011					2.05			0.33	3.00		4.68			**10.06**
012-870-012								0.66			2.38			**3.04**
012-870-013								3.03	0.89		0.56			**4.48**
012-870-019									1.55		0.76			**2.31**
012-870-020									1.82		1.16			**2.98**
012-870-022									0.60		5.75			**6.35**
012-870-023								0.53	0.32		5.07			**5.92**
012-870-024								0.85			4.15			**5.00**
012-870-025								0.00	3.46		1.20			**4.66**
012-880-001											1.81			**1.81**
012-880-004											1.88			**1.88**
012-880-005											2.77			**2.77**
012-880-006											5.73			**5.73**
012-880-009								0.17	0.12		0.93			**1.22**
012-880-010								0.05	1.37		0.26			**1.67**
012-880-011					0.12				1.20		2.72			**4.04**
012-880-012											1.18			**1.18**
022-020-019											1.02			**1.02**
022-020-020											1.02			**1.02**
022-020-021											0.94	0.08		**1.02**
022-020-022											0.74	0.40		**1.15**
022-020-023											0.64	0.55		**1.19**
022-020-024											0.94	0.10		**1.05**
022-020-026											1.53			**1.53**
022-020-027				0.09							1.82			**1.91**
022-020-028											7.48			**7.48**
022-020-029											3.75			**3.75**
022-210-003											1.31			**1.31**
022-210-004				6.35							3.14			**9.49**
022-210-005				3.76							1.11			**4.87**
022-210-018											1.43			**1.43**
022-230-064					1.52		1.41	7.92			0.00			**10.85**
022-230-081					6.44			0.56			5.09			**12.10**
022-241-042							0.48	2.43			0.74			**3.66**
022-241-051								4.23	0.20		12.39			**16.82**
022-241-054					0.01			0.29			1.01			**1.31**
022-690-006											1.01			**1.01**
022-690-009								0.87			0.31			**1.18**
022-690-010											1.01			**1.01**
022-690-011											1.00			**1.00**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
022-690-012											1.00			**1.00**
022-690-013											1.01			**1.01**
022-690-014											1.02			**1.02**
022-690-015											1.06			**1.06**
022-690-016											1.03			**1.03**
022-690-017								0.72			0.42			**1.14**
022-690-025					0.22						1.39			**1.60**
022-690-030					0.92			0.33			0.56			**1.81**
022-690-031											4.48			**4.48**
022-690-032											3.29			**3.29**
022-690-033											2.07			**2.07**
022-690-034								0.53			1.50			**2.02**
022-690-035					0.44			0.01			2.31			**2.76**
023-140-023									2.58		0.39			**2.97**
023-140-025									1.80		0.92			**2.73**
023-160-010											0.89			**0.89**
023-160-013											0.86			**0.86**
023-160-014											0.93			**0.93**
023-590-022						0.48		0.01			2.50			**2.98**
023-590-024											2.65			**2.65**
026-010-001									0.28					**0.28**
026-010-002								0.54	2.82					**3.36**
026-010-011									0.42					**0.42**
026-010-012									0.48					**0.48**
026-010-013									0.46					**0.46**
026-010-014							0.12		0.78					**0.90**
026-010-015							0.05		0.42					**0.47**
026-010-016							0.11		1.29		0.49			**1.89**
026-010-018							3.14		0.57		4.31			**8.02**
026-010-026							0.25		1.28					**1.53**
026-030-006					3.26			3.18	0.92		13.41			**20.78**
026-030-008					1.14						4.01			**5.15**
026-030-009					0.69				0.05		0.47			**1.21**
026-030-010									13.05		8.14			**21.18**
026-030-015											1.55	1.39		**2.95**
026-030-016									0.12		3.37	0.04		**3.53**
026-070-033									2.67					**2.67**
026-070-034								0.12	2.54					**2.67**
026-070-035								0.09	2.58					**2.67**
026-070-036								1.67	0.98					**2.66**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
026-070-052					0.31		4.73		4.28		15.23			**24.56**
026-070-053							2.08	0.17	2.38		3.14			**7.77**
026-070-057								1.81	0.19					**2.00**
026-070-059									8.03		4.40			**12.43**
026-070-060							0.03	3.47	4.73		5.65			**13.88**
026-070-061							0.11	8.66	0.23		1.78			**10.78**
026-070-062							0.13	5.45			6.01			**11.59**
026-090-006	1.34			0.21			0.63	11.20		6.45	1.52			**21.35**
026-090-007				0.84					0.15	0.00				**0.98**
026-090-009				0.08					0.45	0.26				**0.79**
026-090-011							1.02	24.35	24.12		19.55			**69.03**
026-090-021								0.18	6.84		1.89			**8.91**
026-090-022								1.39	3.85		5.00			**10.24**
026-090-040				0.39				6.25	4.11		7.54			**18.30**
026-100-002								0.04	3.54		0.02			**3.61**
026-100-006									1.44		0.56			**2.00**
026-100-011									0.77		0.43			**1.20**
026-100-012									0.25		0.76			**1.02**
026-100-016									1.13		1.14			**2.27**
026-100-018									0.71		0.41			**1.12**
026-100-021											3.00			**3.00**
026-100-028									0.56		1.93			**2.50**
026-100-031									0.74		0.88			**1.62**
026-100-033								0.48	2.69		0.63			**3.80**
026-100-034								0.39	2.08		0.23			**2.70**
026-100-037								0.00	2.55		0.33			**2.89**
026-110-001								0.03			1.90			**1.93**
026-110-002											1.41			**1.41**
026-110-003											0.96			**0.96**
026-110-029											0.91			**0.91**
026-110-030											0.90			**0.90**
026-110-031											0.89			**0.89**
026-110-033											2.05			**2.05**
026-110-036											1.95			**1.95**
026-120-002								0.56			3.52			**4.08**
026-120-003											3.41			**3.41**
026-120-005											4.01			**4.01**
026-120-006								0.01			7.32			**7.33**
026-120-012											3.98			**3.98**
026-130-003								6.35			1.11			**7.45**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
026-130-007							2.47	3.42			2.34			**8.24**
026-130-008							0.08	6.22			0.30			**6.60**
026-130-009								3.11						**3.11**
026-130-010		1.52						4.40	0.00					**5.93**
026-130-011	0.43	3.20												**3.63**
026-130-012	1.85	0.01												**1.85**
026-130-017								2.02			2.98			**5.00**
026-130-019	13.24	11.13					5.26	51.59	5.50		13.99	0.90		**101.61**
026-130-020	2.85	7.61					0.41	0.88						**11.75**
026-140-001	0.23								1.54					**1.78**
026-150-013	5.36	2.06						4.32	3.33					**15.07**
026-150-014	2.31	3.74						2.61	1.52					**10.18**
026-280-003								0.02			7.60			**7.62**
026-280-005											5.14			**5.14**
026-290-002											5.41			**5.41**
026-290-006								0.09			5.13			**5.22**
026-300-003								0.90			5.02			**5.92**
026-300-006								6.98	2.25					**9.23**
026-300-007								2.21	2.46		0.62			**5.30**
026-300-008								3.79	3.02					**6.80**
026-310-006								0.37			0.08			**0.45**
026-310-007								0.23			0.14			**0.37**
026-310-009								0.00			0.28			**0.28**
026-310-011											0.29			**0.29**
026-310-013											0.97			**0.97**
026-310-014											0.36			**0.36**
026-310-015											0.36			**0.36**
026-310-016											0.53			**0.53**
026-310-018											0.43			**0.43**
026-320-001								0.55			0.18			**0.73**
026-320-002								0.38			0.13			**0.50**
026-320-003								0.25			0.40			**0.65**
026-320-004								0.67						**0.67**
026-320-005								0.90			0.06			**0.96**
026-320-006								0.41						**0.41**
026-320-007								0.42						**0.42**
026-320-015								0.02			0.29			**0.31**
026-320-017								0.27			0.06			**0.33**
026-510-001			20.83	5.03				24.38	9.09					**59.34**
026-510-002		0.01	2.49	1.82				1.32	2.23					**7.87**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
026-510-003	2.25	4.77	4.33	7.60				3.78	2.55	1.22	0.02			**26.52**
026-510-004	6.69		2.47	4.63				59.32	5.99	8.48	84.89			**172.48**
026-510-005	0.30							0.07						**0.37**
028-010-002				0.52				1.84						**2.36**
028-010-014				1.41				11.95	4.43		1.85			**19.63**
028-010-015								4.96	0.06					**5.02**
028-010-016								5.00						**5.00**
028-010-017							1.02	3.98			0.00			**5.00**
028-010-024				7.48				10.99			1.15			**19.62**
028-010-027				0.04	0.25			14.20			5.03			**19.52**
028-010-033				1.01				1.50	0.03					**2.54**
028-010-036								5.70	0.82					**6.52**
028-010-037	0.07			1.00				0.55	4.18					**5.79**
028-010-038	3.20			0.13				2.17	0.57					**6.05**
028-010-039	2.96			0.00				2.28	0.19					**5.44**
028-010-042				3.65				1.39						**5.04**
028-010-043				4.32				5.58	0.10		0.00			**10.00**
028-020-002				5.08				0.33	2.25		3.10			**10.77**
028-020-003				0.03				0.64	3.06		0.13			**3.86**
028-020-004								0.49	0.05		1.08			**1.62**
028-020-005							4.06				5.53			**9.59**
028-020-013									0.00		2.91			**2.91**
028-020-014				0.45				0.07	0.09		0.24			**0.85**
028-020-015				4.90				4.53	1.00		1.28			**11.71**
028-020-017									0.31					**0.31**
028-020-023									4.19		3.39			**7.58**
028-020-025								0.06	1.38		3.99			**5.42**
028-020-039								13.80	4.12		0.39			**18.31**
028-020-040								5.53	19.52					**25.06**
028-020-051	0.07								1.79		7.08			**8.93**
028-020-052											7.15			**7.15**
028-230-035							0.31	1.02	6.71		4.60			**12.64**
028-230-036								6.61	0.91		0.08			**7.60**
028-230-038								2.45	2.49					**4.94**
028-230-039								3.05	2.05		5.02			**10.12**
028-230-042							1.92		3.04		0.10			**5.05**
028-230-043							2.67		1.18		1.20			**5.05**
028-230-046								2.46	6.75					**9.21**
028-230-049								6.04	11.38		0.03			**17.46**
028-230-054								0.06	8.69		2.88			**11.64**

Table 3. Vegetation Communities and Land Cover Types Present by Parcel in the BSA

APN/Parcel Type	Vegetation Communities and Land Cover Types in the BSA													
	AG	BOW	BOFP	CROP	DOFI	LAC	CHAP	MOHA	MOHC	MORI	POPI	URB	VIN	Total
028-230-055							0.68		6.41					**7.09**
028-240-003								0.05	0.01		10.07			**10.13**
028-240-004							9.06	4.02	10.72		58.53			**82.33**
028-240-006							0.10	9.99	6.54		23.64			**40.28**
028-240-011							0.36				1.17			**1.53**
028-240-012							0.47				2.42			**2.89**
028-240-013							0.61	0.78			1.68			**3.07**
028-250-006			5.66					61.12	3.67		11.80			**82.24**
028-250-008		0.23	0.04					0.14	7.84					**8.26**
028-250-009			0.09					0.17						**0.25**
028-250-010			2.05				20.22	68.53	47.27		16.13			**154.21**
028-250-017	13.52							9.98	14.67		0.73			**38.89**
028-250-025									10.11		0.45			**10.55**
028-250-026	4.87							4.85	7.26					**16.98**
028-250-033	1.54	6.66		3.05			5.28	13.12	0.07					**29.73**
028-250-035			8.27					2.38	2.59		0.57			**13.82**
028-250-039	0.27		1.15		2.99			3.80	13.64		13.24			**35.10**
028-250-041	0.08		0.00						5.78		4.60			**10.47**
028-250-042	7.60		5.19					21.91	13.50		11.17			**59.36**
028-250-045		0.03	0.01				0.72	8.70	0.20					**9.67**
028-250-046		0.22					4.23	5.28						**9.74**
028-250-047	12.27	0.42						0.47	2.60					**15.76**
028-250-048	3.29							0.69						**3.98**
028-270-049	9.31	0.88		0.80				0.54						**11.52**
Right-of-Way	3.13	1.33	1.03	3.13	6.45		0.51	12.83	7.72	0.52	40.28			**76.93**
Total	**99.03**	**43.82**	**53.61**	**99.00**	**170.04**	**0.48**	**85.42**	**662.22**	**467.21**	**16.93**	**1019.31**	**3.46**	**0.46**	**2,721.18**

Notes: Totals may not sum due to rounding.
AG = Annual Grassland
BOW = Blue Oak Woodland
BOFP = Blue Oak-Foothill Pine
CROP = Cropland
DOFI = Douglas Fir
LAC = Lacustrine
CHAP = Mixed Chaparral
MOHA = Montane Hardwood
MOHC = Montane Hardwood-Conifer
MORI =
POPI = Ponderosa Pine
URB = Urban
VIN = Vineyard

Attachment D

Recommendations for Biological Resources

Recommendations for Biological Resources

This section provides recommendations for implementing PEIR SPRs and MMs specific to the Woodpecker Ravine Shaded Fuel Break Phase I Project (project). SPRs that do not apply to the proposed treatment are SPR BIO-8: Identify and Avoid or Minimize Impacts to Coastal Zone ESHAs, and SPR BIO-11: Install Wildlife Friendly Fencing (Prescribed Herbivory). The project is located outside of the Coastal Zone and does not include prescribed herbivory. Additionally, any recommendations provided by CDFW and USFWS during consultation should be incorporated into the final treatment plan.

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

SPR BIO-2: Require Biological Resource Training for Workers. All crew members and contractors are required to receive training from a biologist prior to beginning a treatment project. The training will include the identification, life history information, and avoidance of special-status species; identification and avoidance of sensitive natural communities and habitats; appropriate work practices necessary to comply with the biological SPRs, mitigation measures, and applicable environmental laws and regulations; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified biologist. The biologist will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). Resources to be addressed are those described in this memorandum. Special-status species to be addressed in the training should include, at minimum, the following:

- California red-legged frog
- Foothill yellow-legged frog
- American goshawk
- California black rail
- Cooper's hawk
- Yellow-breasted chat
- Western bumble bee
- Fisher
- Townsend's big-eared bat
- Ringtail
- Northwestern pond turtle

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

SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. Sensitive natural communities were identified within the project area during the data review and reconnaissance-level field surveys. Prior to project implementation, these communities will be mapped in accordance with CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2021) in accordance with SPR BIO-3. Sensitive natural communities identified in the project area include (but are not limited to): bigleaf maple forest and woodland, Fremont cottonwood forest and woodland, and valley oak woodland and forest. The locations of these sensitive natural communities are depicted on Figure 2.

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

Furthermore, **MM BIO-3a** applies to the project. Specifically:

- Reference the Manual of California Vegetation, Appendix 2, Table A2, Fire Characteristics (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/)or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.
- Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in Fire in California's Ecosystems (Van Wagtendonk et al. 2018) and the Manual of California Vegetation (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.
- To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).
- To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).
- Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in Fire in California's Ecosystems (Van Wagtendonk et al. 2018) and the Manual of California Vegetation (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/).

- The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).
- A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.
- The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.

SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. The project site supports three CDFW sensitive vegetation communities or land cover types including wetland and riparian communities: bigleaf maple forest and woodland, Fremont cottonwood forest and woodland, and valley oak woodland and forest. If impacts to these sensitive natural communities cannot be avoided, treatment activities would be designed to avoid loss or degradation of riparian habitat function in accordance with SPR BIO-4. Specifically:

- Treatment activities will be designed to retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.
- Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows)

of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.

- Treatments will minimize the removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless the applicable regulatory agencies approve otherwise).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.
- Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.
- The project proponent will notify CDFW pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.
- In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets will be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.

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

SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. Mixed chaparral in the project area is generally fragmented (lacking large contiguous patches) and comprises less than 2% of the proposed treatment area. At least 160 acres of mixed chaparral within the greater project area would be retained. Therefore, treatment activities within mixed chaparral would be designed to avoid type conversion in accordance with SPR BIO-5. Specifically:

- The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.

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

SPR BIO-6: Prevent Spread of Plant Pathogens. Sensitive natural communities in or adjacent to the treatment area, such as riparian woodland and oak woodland, are at risk from plant pathogens. Therefore, the project proponent will implement best management practices in accordance with SPR BIO-6. Specifically:

- Clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site;
- Include training on 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
- Avoid ground disturbance when soils are wet enough to stick readily to shoes, tools, equipment and tires.

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

SPR BIO-7: Survey for Special-Status Plants. Two survey passes in May and July should be adequate to detect all special-status plant species with potential to occur in the treatment area. The surveys will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of the 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.

Furthermore, MM BIO-1a applies to the project. Specifically:

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

Furthermore, MM BIO-1b applies to the project. Specifically:

- If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:

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

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

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. Where invasive plants, noxious weeds, and invasive wildlife occur throughout the treatment area, these invasive species would be removed in accordance with SPR BIO-9. Specifically:

- All clothing, footwear, and equipment must be appropriately decontaminated before entering the treatment area and when leaving an area with invasive species;
- All heavy equipment and vehicles entering treatment zones must be inspected and pressure washed or otherwise decontaminated at a designated weed-cleaning station prior to entering the treatment area. Anti-fungal wash agents could be specified if the equipment was exposed to any pathogens that could affect native species;
- Equipment must be staged in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
- Significant infestations of invasive plant species identified during reconnaissance-level surveys will be targeted for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;
- Treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and
- Implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version).

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

SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. The project area contains habitat potentially suitable for special-status wildlife species and nursery sites. Therefore, the proponent will require a qualified biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts) with potential to be directly or indirectly affected by a treatment activity. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed. Implementation of SPR BIO-10 would include the following measures.

- **California Red-legged Frog:** Suitable aquatic habitat for California red-legged frog (CRLF) within the treatment areas consist of existing aquatic features (e.g., seasonal and perennial wetlands, ponds, and creeks) and suitable upland refugia with consistent summer moisture, including downed logs, burrows, hollows in trees or roots, moist leaf litter, and similar microhabitats. Therefore, the following measures will be implemented to avoid impacts on CRLF:
  - Either protocol level surveys following the *Revised Guidance on Site Assessments and Field Surveys for California Red-legged Frog* (USFWS 2005) will be conducted within the project area, or presence of CRLF will be assumed in potentially suitable habitat.

- No treatment activities will occur within potentially suitable aquatic habitat for CRLF.
- A qualified biologist will perform visual surveys for CRLF within 24 hours prior to any treatment activities occurring within 50 feet of suitable aquatic habitat for CRLF.
- A qualified biologist will perform daily pre-treatment surveys and monitoring for any treatment activities within 300 feet of suitable aquatic habitat during the dispersal season (October 1 through April 1) or within 24 hours following a rain event greater than 0.25 inches.
- If CRLF is found during pre-treatment surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless it is determined by the qualified biologist that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own volition. Any CRLF occurrences would be immediately reported to the qualified biologist, and USFWS would be consulted on the appropriate course of action to avoid species take. No take of this species can occur without obtaining incidental take authorization under the federal Endangered Species Act. The specific habitat features used by the frog when detected will be evaluated for habitat retention if habitat retention will meet the project goals.
- No mechanized operations may occur in a Class I or Class II watercourse in which Watercourse and Lake Protection Zone (WLPZ) protections have been implemented in accordance with SPR HYD-4**,** or within 30 feet of a Class III WLPZ or adjacent to wet seeps. Handwork may continue in these areas if the area has been surveyed by a qualified biologist no more than 7 days prior to operations.
- No heavy equipment may be fueled within 65 feet of any watercourse.

- **Foothill Yellow-legged Frog:** Suitable aquatic habitat for foothill yellow-legged frog (FYLF) within the treatment areas consist of existing aquatic features (e.g., seasonal and perennial wetlands, ponds, and creeks) and suitable upland refugia with consistent summer moisture, including downed logs, burrows, hollows in trees or roots, moist leaf litter, and similar microhabitats. Therefore, the following measures will be implemented to avoid impacts on FYLF:
  - No treatment activities will occur within potentially suitable aquatic habitat for FYLF.
  - Focused surveys for FYLF will be conducted by a qualified biologist no more than 48 hours prior to mechanical and manual treatments within 50 feet of suitable aquatic habitat for FYLF. As recommended in CDFW's Considerations for Conserving the Foothill Yellow-legged Frog (2018), the survey will target suitable aquatic and riparian habitats at least 500 feet upstream and downstream of a given treatment area. If surface water is present within the treatment footprint, a qualified biologist will inspect the work site daily prior to and during any ground disturbance in these areas.
  - If FYLF is found during pre-treatment surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless it is determined by the qualified biologist that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own volition or is relocated to suitable habitat outside of the treatment area by a qualified biologist.
  - Any FYLF occurrences would be immediately reported to the qualified biologist and CDFW.
- **Northwestern Pond Turtle:** Suitable habitat for northwestern pond turtle (NWPT) within the project area consist of existing aquatic features (e.g., seasonal and perennial wetlands, ponds, and slow-moving creeks) and suitable upland habitat within 1,640 feet of aquatic habitat. Suitable upland nesting habitat for NWPT typically consists of areas containing sparse vegetation and well-drained, soft soils below minimal canopy. Therefore, the following measure would be implemented to avoid impacts on NWPT:

- No treatment activities will occur within suitable aquatic habitat for NWPT.
- Pre-activity surveys for NWPT will be conducted by a qualified biologist no more than 48 hours prior to mechanical and manual treatments within 50 feet of suitable aquatic habitat for NWPT. The biologist will follow the recommended survey techniques for basking or visual encounter surveys detailed in the Department of Defense (DOD) and U.S. Fish and Wildlife Service (USFWS) *Recommended Best Management Practices for the Western Pond Turtle on Department of Defense Installations* (2020).
- No ground-disturbance will occur within 656 feet (200 meters) of any aquatic habitat occupied by NWPT (as determined during pre-activity surveys). Biological monitoring by a qualified biologist during mechanical and manual treatment activities within or adjacent to these areas would be implemented to avoid injury to or mortality of individual turtles or nests.
- No treatment activities will occur in suitable upland habitat for NWPT within 500 meters (1,640 feet) of suitable aquatic habitat during the turtle overwintering period from October to March. Biological monitoring by a qualified biologist during mechanical and manual treatment activities within or adjacent to these areas during the overwintering period would be implemented to avoid injury to or mortality of individual turtles or nests.
- If NWPT is detected during pre-treatment surveys or treatments, a non-disturbance buffer of 100 feet will be implemented around the individual unless it is determined by a qualified biologist that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the animal has left the area or has been moved out of harm's way and to other nearby habitat suitable for the species by the qualified biologist.
- Any NWPT occurrences would be immediately reported to the qualified biologist and CDFW.

- **Western Bumble Bee:** Suitable foraging habitat for western bumble bee within the treatment area consists of flowering resources and suitable overwintering or nesting habitat includes downed logs, burrows, hollows in trees or roots, and leaf litter. Therefore, the following measure would be implemented to avoid impacts on western bumble bee:
  - Prior to implementing treatment activities, a qualified biologist will conduct reconnaissance surveys within the treatment area for suitable western bumble bee habitat that contains associated floral resources.
  - If suitable habitat and/or western bumble bee is present, avoidance would be implemented in accordance with **MM BIO-2g**. Specifically:
    - Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season.
    - Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area.
    - Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area).
    - Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September).

- **Nesting Birds:** There is suitable nesting habitat throughout the treatment area for common and special-status birds and raptors, including American goshawk, California black rail, Cooper's hawk, and yellow-breasted chat. For specific survey and avoidance measures for nesting birds, see SPR BIO-12 below.
- **Roosting Bats:** Suitable bat roosting habitat within the treatment area includes trees with sufficient foliage, pealing bark, and cavities, as well as bridges, buildings, and other human-made structures. Therefore, the following measures would be implemented to avoid impacts on roosting bats:
  - If treatment area activities require the removal of trees during peak activity timeframes when young or overwintering bats may be present (generally March through April, and August through October), such activities could directly impact active bat roosts. To avoid impacts to active bat roosts, tree removals would occur outside peak bat activity timeframes to the extent feasible. Additionally, it is recommended that daily restrictions on the timing of any work activities be limited to daylight hours to reduce disturbance to roosting (and foraging) bat species.
  - A biologist with demonstrated experience conducting bat habitat assessments and roost surveys would conduct a focused survey of trees identified for removal no more than 30 days prior to any removals during peak bat activity timeframes. The survey would include a determination on whether active bat roosts are present on or within 50 feet of the treatment site. If a special-status bat species is confirmed as roosting within any of the treatment areas, CDFW would be contacted for additional instruction. If a non-breeding and non-wintering common bat colony is found, the individuals would be evicted under the direction of a qualified biologist to ensure their protection and avoid unnecessary harm. If a special-status bat roost is detected, a no-disturbance buffer of 250 feet will be established around the roost during the bat maternity season (April 1 through August 31), and no treatment activities will occur within this buffer until the roost is no longer being used as determined by a qualified biologist.
- **Fisher:** Mature forest, especially closed-canopy forest proximate to perennial streams, in the project area could support fisher. Therefore, the following measures will be implemented to avoid impacts on fisher:
  - A qualified biologist will conduct a pedestrian survey of suitable forest habitat for potential den sites (e.g., tree snags, tree cavities, downed logs) in the treatment area within 7 days prior to the start of mechanical and manual treatments. Potential den sites will be completely avoided during the denning season (October through June) or marked with flagging or spray paint for further inspection during subsequent camera trap surveys. Camera trap surveys should be conducted using the relevant methodology described in *Survey Protocol for Fisher Denning Season: Methods for Informing Denning Protection Measures* (Tucker et al. 2020).
  - If an active den is discovered, the qualified biologist will be notified, all work will stop, a no-disturbance buffer of at least 650 feet will be implemented around the den, and treatment activities will not proceed within the buffer until the end of the denning season (June 30) or if the qualified biologist is able to confirm that the den is no longer occupied during further inspection (i.e., camera trap surveys).
  - CDFW will be notified of any active den and buffer location.
- **Ringtail:** Potentially suitable habitat for ringtail in the treatment area includes woodland, forest, and shrub communities with potential den sites. Den structures include hollow logs, rock piles, and large trees greater than 12 inches dbh with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities 12 inches deep) at or near ground level. Therefore, the following measures would be implemented to avoid impacts on ringtail:
  - A qualified biologist will conduct a den search in the treatment area within 7 days prior to the start of mechanical and manual treatments. If cavities are found, the qualified biologist will inspect them, if safely accessible, using a cell phone with a flash or a borescope to determine whether a ringtail is

present. Large trees with appropriate cavities will be marked with flagging or spray paint for inspection during further surveys and for potential avoidance during the maternity season (April 15-June 30). The qualified biologist will also search for dens in dense brush and will note any sightings of fleeing adult ringtails.

- On the morning of treatment, a qualified biologist will search all suitable habitat for ringtails where mastication or tree removal will occur that day (i.e., larger trees, heavy brush, rock piles) for active dens or adults, including trees with cavities previously marked by the qualified biologist. On following days, a trained contractor will search all areas previously marked by the qualified biologist for active dens.
- If an active den is discovered, the qualified biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 miles will be implemented around the den, and treatment activities will not proceed within the buffer until the end of the ringtail maternity season (June 30) or after the qualified biologist has confirmed that the den is no longer occupied.
- Any potential den structures where the biologist is not able to determine occupancy will be retained until the end of the ringtail maternity season (June 30).
- CDFW will be notified of any active den and buffer location. CDFW will be provided the opportunity to visit the site and provide technical information on the size and shape of the den buffer.

- Puma: Puma is known to occur in the project area and could potentially den in or adjacent to the treatment area. Appropriate nursery habitat for puma includes caves, large natural cavities in rocky areas, or thickets. Therefore, the following measures would be implemented to avoid impacts on puma nursery sites:
  - A qualified biologist will conduct a focused survey for puma nursery sites in the treatment area within 7 days prior to the start of mechanical and manual treatments. The biologist will search for signs of activity (tracks, scat, prey items) and publicly reported puma sightings near potential nursery habitat to determine whether the area may contain a puma nursery.
  - If no puma or sign of a nursery is observed, treatment in the area may proceed.
  - If signs of a puma nursery are observed, the biologist will use trail cameras, track plates, hair snares, and/or other noninvasive methods for 3 days and 3 nights to determine whether the nursery is active. If these methods determine that the nursery is active, a no-disturbance buffer of at least 2,000 feet will be established for a minimum of 10 weeks. Treatment will not occur within this buffer during this time to avoid disturbance, injury, or mortality of pumas.
- Deer Fawns: The project area provides mule deer fawning habitat. Therefore, the following measures would be implemented to avoid impacts on mule deer nursery sites:
  - A qualified biologist will conduct focused surveys for fawning sites within 7 days prior to treatment activities during the mule deer fawning season (May 1 through August 31).
  - If no fawn or sign of a mule deer nursery site is observed, treatment in the area may proceed.
  - If fawns or signs of a nursery site are observed, a non-disturbance buffer of at least 100 feet will be implemented around the site unless it is determined by a qualified biologist that a different sized buffer is appropriate to avoid injury or mortality. Treatment activities will cease within the buffer until the nursery site is no longer active as determined by the qualified biologist.

Unless otherwise stated, the locations of special-status species and/or nursery sites would be marked in the field, and measures would be implemented to avoid impacts and maintain habitat function in accordance with MM BIO-2a or MM BIO-2b. Specifically:

- 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.
- For all treatment activities except prescribed burning, a no-disturbance buffer of a minimum of 100 feet will be established around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries), unless a smaller buffer would be sufficient for protection, or a larger buffer would be needed.
- No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified biologist may be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment if the treatment activity has the potential to result in mortality, injury, or disturbance. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified biologist will have the authority to stop any treatment activities that could result in mortality, injury, or disturbance to special-status species.
- For prescribed burning, the treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified biologist will determine the period within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species.
- While performing surveys, the qualified biologist will identify any habitat features that are necessary for survival of the affected wildlife species. These habitat features will be marked, and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.
- A qualified biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment.

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

SPR BIO-12: Protect Common Nesting Birds, including Raptors. If project treatment is initiated between February 15 and September 1, and active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) will be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment sites and the immediately surrounding vicinity viewable from the treatment sites. The survey areas will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically 1 day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, as required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving

walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).

If active nests are located or determined to likely be present (i.e., presence of eggs and/or chicks), buffers, avoidance, treatment modifications, and/or treatment deferral would be implemented in accordance with SPR BIO-12, which may include, but is not limited to, one or more of the following measures:

- **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.
- **Modify Treatment.** The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.
- **Defer Treatment.** The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.

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

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

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

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

SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones. The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below which is based on 14 CCR Section 916.5 of the California Forest Practice Rules (February 2019 version). WLPZs are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

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

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

Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version).
Notes:
1 WLPZ width (ft) – distance from top of bank to the edge of the protection zone.
2 Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced, a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).
- Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.

- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.
- WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.
- Burn piles will be located outside of WLPZs.
- No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.
- Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15 and disturbances that are created after October 15 shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, riprap, grass seeding, or chemical soil stabilizers.
- Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.
- Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.
- Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.

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

Other Recommendations

- Any additional recommendations provided by CDFW or USFWS prior to the implementation of treatment activities would be incorporated into the treatment plan.

Attachment E

Special-Status Plant Potential to Occur

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Calycadenia spicata	Spicate calycadenia	None/None/1B.3	Cismontane woodland, Valley and foothill grassland; Adobe, Clay, Disturbed areas, Dry, Gravelly, Openings, Roadsides, Rocky/annual herb/May–Sep/ 130–4,595	**Moderate potential to occur.** The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation which could support this species. The nearest record of this species occurs approximately 4 miles northwest of the BSA (CCH 2025).
Calystegia stebbinsii	Stebbins' morning-glory	FE/SE/1B.1	Chaparral (openings), Cismontane woodland; Gabbroic (sometimes), Seeps (sometimes)/perennial rhizomatous herb/Apr–July/605–3,575	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation which could support this species. The nearest records of this species occur approximately 5 miles west of the BSA (CCH 2025).
Calystegia vanzuukiae	Van Zuuk's morning-glory	None/None/1B.3	Chaparral, Cismontane woodland; Gabbroic, Serpentinite/perennial rhizomatous herb/May–Aug/ 1,640–3,870	**Low potential to occur.** The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation which could support this species. However, the BSA lacks serpentine soils associated with this species (Calflora 2025). Additionally, records of this species occur at least 12 miles east of the BSA, near Hughes mill (CCH 2025).
Carex cyrtostachya	Sierra arching sedge	None/None/1B.2	Lower montane coniferous forest (mesic), Marshes and swamps, Meadows and seeps, Riparian forest (margins)/perennial herb/ May–Aug/2,000–4,460	**Low potential to occur**. The BSA is within the species' known elevation range and contains suitable lower montane coniferous forest vegetation which could support this species. However, the BSA appears to be outside of the species' known geographic range, with the majority of records occurring more than 20 miles away from the BSA, near Strawberry Valley

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				to the north and Georgetown to the south (CCH 2025).
Carex sheldonii	Sheldon's sedge	None/None/2B.2	Lower montane coniferous forest (mesic), Marshes and swamps (freshwater), Riparian scrub/perennial rhizomatous herb/May–Aug/3,935–6,600	**Not expected to occur**. The BSA is outside of the species' known elevation range.
Carex xerophila	chaparral sedge	None/None/1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; Gabbroic, Serpentinite/perennial herb/ Mar–June/1,440–2,525	**Low potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation which could support this species. However, the BSA lacks serpentine soils associated with this species (Calflora 2025).
Chlorogalum grandiflorum	Red Hills soaproot	None/None/1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; Gabbroic, Serpentinite/perennial bulbiferous herb/(Apr)May–June/805–5,540	**Low potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation which could support this species. However, the BSA lacks serpentine soils associated with this species (Calflora 2025).
Fremontodendron decumbens	Pine Hill flannelbush	FE/SR/1B.2	Chaparral, Cismontane woodland; Gabbroic (sometimes), Rocky, Serpentinite (sometimes)/perennial evergreen shrub/Apr–July/1,390–2,490	**Low potential to occur.** The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation that could support this species. However, the BSA appears to be outside the species' known geographic range, with the majority of records occurring south of Auburn, approximately 30 miles south of the BSA.

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Juncus digitatus	finger rush	None/None/1B.1	Cismontane woodland (openings), Lower montane coniferous forest (openings), Vernal pools (xeric)/annual herb/(Apr)May–June/2,165–3,595	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains cismontane woodland vegetation that could support this species, and wet areas that may be consistent with the microhabitat needs of the species. The nearest record of this species occurs approximately 2 miles northeast of the BSA near Grass Valley (CCH 2025).
Lewisia cantelovii	Cantelow's lewisia	None/None/1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest; Granitic, Mesic, Seeps (sometimes), Serpentinite (sometimes)/perennial herb/ May–Oct/1,080–4,490	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland and lower montane coniferous forest vegetation that could support this species. The nearest record of this species is approximately 7 miles north of the BSA, near Grass Valley (CCH 2025).
Lycopodiella inundata	inundated bog-clubmoss	None/None/2B.2	Bogs and fens (coastal), Lower montane coniferous forest (mesic), Marshes and swamps (lake margins)/perennial rhizomatous herb/June–Sep/15–3,280	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable lower montane coniferous forest vegetation that could support this species. Additionally, there are ponds and other wet areas within the BSA that may support this species. The nearest record of this species is approximately 8 miles east of the BSA near Goldrun (CCH 2025).

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Packera layneae	Layne's ragwort	FT/SR/1B.2	Chaparral, Cismontane woodland; Gabbroic (sometimes), Rocky, Serpentinite (sometimes)/perennial herb/Apr–Aug/655–3,555	**Low potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation with rocky soils (USDA 2024) that could support this species. However, the BSA appears to be outside the species' known geographic range, with the majority of records occurring south of Auburn, approximately 30 miles south of the BSA (CCH 2025).
Phacelia stebbinsii	Stebbins' phacelia	None/None/1B.2	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps/annual herb/May–July/ 2,000–6,590	**Low potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation that could support this species. However, the BSA appears to be outside of the species' known geographic range, with the majority of records occurring at least 15 miles to the east in the mountains east of Lake Tahoe (CCH 2025).
Poa sierrae	Sierra blue grass	None/None/1B.3	Lower montane coniferous forest; Openings/perennial rhizomatous herb/Apr–July/1,195–4,920	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable lower montane coniferous forest vegetation that could support this species. The nearest record of this species is approximately 5 miles east of the BSA, near Colfax (CCH 2025).
Rhynchospora capitellata	brownish beaked-rush	None/None/2B.2	Lower montane coniferous forest, Marshes and swamps, Meadows and seeps, Upper montane coniferous forest; Mesic/perennial herb/July–Aug/ 150–6,560	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable lower montane coniferous forest vegetation that could support this species. Additionally, there are wet areas within the BSA that may be consistent with the microhabitat needs of this species. The nearest record of this

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				species occurs approximately 2 miles northwest of the BSA near Grass Valley (CCH 2025).
Sidalcea stipularis	Scadden Flat checkerbloom	None/SE/1B.1	Marshes and swamps (montane freshwater)/perennial rhizomatous herb/July–Aug/2,295–2,395	**High potential to occur**. The BSA is within the species' known elevation range and contains wet areas that may be consistent with the microhabitat needs of the species. Additionally, the BSA overlaps with CNDDB records of this species (CDFW 2025).
Streptanthus tortuosus ssp. *truei*	True's mountain jewelflower	None/None/1B.1	Lower montane coniferous forest; Rocky, Slopes/perennial herb/June–July (Sep)/2,505–2,820	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland vegetation with rocky soils (USDA 2025) that could support this species. However, the majority of records are approximately 17 miles north of the BSA, near Camptonville (CCH 2025).
Viburnum ellipticum	oval-leaved viburnum	None/None/2B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest/perennial deciduous shrub/May–June/705–4,590	**Moderate potential to occur**. The BSA is within the species' known elevation range and contains suitable cismontane woodland and lower montane coniferous forest vegetation that could support this species. The nearest records of this species occur approximately 8 miles southwest of the BSA, near Wolf Creek (CCH 2025).

Status Legend
FE: Federally listed as endangered
FT: Federally listed as threatened
SE: State listed as endangered
ST: State listed as threatened
SR: State listed as rare
CRPR: California Rare Plant Rank
1A: Plants presumed extirpated in California and either rare or extinct elsewhere
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Rank

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

Known to occur: the species has been documented in the BSA by a reliable source.
High potential to occur: the species has not been documented in the BSA but is known to recently occur in the vicinity and suitable habitat is present.
Moderate potential to occur: the species has not been documented in the BSA or vicinity, but the site is within the known range of the species and suitable habitat for the species is present.
Low potential to occur: the species has not been documented in the BSA or vicinity, but the site is within the known range of the species; however, suitable habitat for the species is of low quality.
Not expected to occur: the BSA is outside the known geographic or elevational range of the species and/or the site does not support suitable habitat for the species.

Attachment F

Special-Status Wildlife Potential to Occur

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
Rana boylii pop. 3	foothill yellow-legged frog - north Sierra DPS	None/ST	Rocky streams and rivers with open banks in forest, chaparral, and woodland	**Moderate potential to occur.** The BSA contains water sources including areas mapped as intermittent streams, perennial streams, wetlands, and freshwater ponds (USGS 2025b) which could provide suitable habitat for this species. There are several records of this species between 2 and 5 miles east of the BSA, in water courses associated with the Rollins Reservoir (CDFW 2025a).
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	**Moderate potential to occur.** The BSA contains water sources including areas mapped as intermittent streams, perennial streams, wetlands, and freshwater ponds (USGS 2025b) that could provide suitable habitat for this species. The only local record of this species occurs approximately 11 miles north of the BSA, where dozens of individuals were observed in a perennial pond in coniferous forest habitat in 2007 (CDFW 2025a).
Reptiles				
Actinemys marmorata	northwestern pond turtle	FC/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	**Moderate potential to occur.** The BSA contains water sources including areas mapped as intermittent streams, perennial streams, and freshwater ponds (USGS 2025b) which could provide suitable aquatic habitat for this species, and adjacent uplands could provide nesting and overwintering habitat. The nearest record of this species occurs approximately 6 miles northeast of the

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				BSA in a watercourse associated with the Rollins Reservoir (CDFW 2025a).
Phrynosoma blainvillii	coast horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	**Low potential to occur**. The BSA contains conifer habitat that could support this species. However, soils within the BSA are generally listed as loam, no sandy (USDA 2024). Additionally, the BSA is generally densely vegetated, and may lack open areas necessary for this species. The nearest record of this species occurs approximately 2 miles northwest of the BSA near Grass Valley (CDFW 2025a).
Birds				
Accipiter atricapillus	American goshawk	None/SSC	Nests primarily in middle- and higher-elevation dense conifer forests; winters at lower elevations along coast, foothills, and northern deserts in riparian and pinyon–juniper woodland	**Moderate potential to occur**. The BSA contains middle elevation dense conifer forest habitat and montane riparian habitat suitable for this species. The nearest record is of a nest site observed within mixed conifer forest between the South Yuba River and Scott's Flat Reservoir in 1998, approximately 10 miles northeast of the BSA (CDFW 2025a).
Accipiter cooperii (nesting)	Cooper's hawk	None/WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	**High potential to occur**. The BSA contains oak woodland habitat and water sources (intermittent streams, perennial streams, and freshwater ponds) which could provide suitable habitat for this species. The nearest record is of a nest site observed within mixed conifer forest between Nevada City and Scott's Flat Reservoir in 2014, approximately 6 miles northeast of the BSA (CDFW 2025a).
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	**Moderate potential to occur**. The BSA may contain suitable riparian nesting habitat adjacent to water sources within the BSA.

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				The only local record of this species occurs approximately 4 miles northeast of the BSA near Grass Valley, where one adult was observed in 2021 (CDFW 2025a).
Laterallus jamaicensis coturniculus	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	**High potential to occur**. The BSA contains freshwater ponds and areas mapped as wetlands (USGS 2025b), which may provide suitable habitat. Additionally, there are several records of this species within 1 mile of the BSA (CDFW 2025a).
Strix occidentalis occidentalis	California spotted owl	BCC/SSC	Nests and forages in dense, old-growth, multi-layered mixed-conifer, redwood, and Douglas-fir habitats	**Low potential to occur**. Although the BSA contains forest habitats, records of this species occur in the Sierra Nevada mountains, with the nearest records approximately 10 miles west of the BSA (eBird 2024).
Mammals				
Bassariscus astutus raptor	northern California ringtail	None/FP	Mixed forests and shrublands near rocky areas or riparian habitats; forages near water and is seldom found more than 1 kilometer (0.62 mile) from a water source	**Moderate potential to occur.** The BSA contains forest, woodland, and riparian habitat potentially suitable for this species. The CNDDB does not track occurrence data for this elusive and nocturnal species. There are five iNaturalist records of this species in western Nevada County, including one occurrence along a drainage upstream of Lake Combie, approximately 5 miles south of the BSA (iNaturalist 2025).
Canis lupus	gray wolf	FE/SE	Montane woodlands and adjacent grasslands at 4,000–5,000 feet above mean sea level where ungulate prey or livestock are plentiful	**Low potential to occur**. The BSA contains woodland and adjacent grassland habitat, but it is below the species elevation range by over 1,000 feet. In addition, there are no documented occurrences of this species in Nevada County (CDFW 2025a).

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	**Moderate potential to occur**. While there is coniferous forest habitat within the BSA, , the BSA lacks limestone caves and lava tubes based on review aerial imagery and Google Earth Street View. However, this species may roost in manmade structures within the BSA. There is a record of this species less than 1 mile from the BSA at the Empire Mine State Historic Park in 2016 (CDFW 2025a).
Pekania pennanti	fisher	None/SSC	Ranges widely in forested regions; uses heavy stands of mixed species of mature trees	**Low potential to occur**. The BSA contains stands of mature oak and coniferous tress which may provide suitable habitat. However, the BSA is situated in an area of regular human use, and there is only one historical record of this species approximately 5 miles from the BSA (CDFW 2025a).
Invertebrates				
Bombus occidentalis	western bumble bee	None/SCE	Nesting most common in cavities (e.g., rodent burrows) in grasslands, agricultural lands, and forests. Overwintering habitat is underground, most often in shaded areas near trees as well as in banks without dense vegetation and in areas with tree litter, moss, or in bare patches within short grass.	**Moderate potential to occur**. Potential nesting, overwintering, and foraging habitat with floral resources is present in the BSA. However, there is only one local record of this species approximately 5 miles from the BSA, and this is a historical record from 1951 (CDFW 2025a).
Branchinecta lynchi	vernal pool fairy shrimp	FT/None	Vernal pools, seasonally ponded areas within vernal swales, and ephemeral freshwater habitats	**Not expected occur**. Soils within the BSA are neutral to moderately acidic loam and are therefore not suitable to support vernal pool systems (USDA 2024).
Desmocerus californicus dimorphus	valley elderberry longhorn beetle	FT/None	Generally occurs in the Central Valley of California, in association with blue elderberry (*Sambucus nigra* ssp. *caerulea*)	**Not expected to occur**. There are no records of this species' host plant (*Sambucus nigra* ssp. *caerulea*) in or within 10 miles of the BSA (CCH 2024). Three records of this species from 2010

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				occur approximately 10 miles south of the BSA near Lake Combie (CDFW 2025a).
Lepidurus packardi	vernal pool tadpole shrimp	FE/None	Ephemeral freshwater habitats including alkaline pools, clay flats, vernal lakes, vernal pools, and vernal swales	**Not expected occur.** Soils within the BSA are neutral to moderately acidic loam and are therefore not suitable to support vernal pool systems (USDA 2024).
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	**Not expected to occur.** The BSA is located in Nevada County, which has no documented overwintering sites for Monarch butterfly (Xerces Society 2016).

Status Legend
BCC: USFWS—Birds of Conservation Concern
FC: Candidate for federal listing as threatened or endangered
FE: Federally listed as endangered
FT: Federally listed as threatened
FP: CDFW Fully Protected species
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: California Species of Special Concern
ST: State listed as threatened
WL: CDFW Watch List species
Known to occur: the species has been documented in the BSA by a reliable source.
High potential to occur: the species has not been documented in the BSA but is known to recently occur in the vicinity and suitable habitat is present.
Moderate potential to occur: the species has not been documented in the BSA or vicinity, but the site is within the known range of the species and suitable habitat for the species is present.
Low potential to occur: the species has not been documented in the BSA or vicinity, but the site is within the known range of the species; however, suitable habitat for the species is of low quality.
Not expected to occur: the BSA is outside the known geographic or elevational range of the species and/or the site does not support suitable habitat for the species.

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Attachment G

Matrix of Biological Resource Recommendations by Treatment Area and Type

Site-Specific Recommendations

This section is intended to refine the biological resource recommendations presented in Attachment D to be site-specific for the Woodpecker Ravine Shaded Fuel Break Phase I Project (project). Dudek obtained the approximately 3697~~0~~-acre treatment footprint in March 2025, after the initial literature review and field surveys were conducted. The treatment footprint, consisting of 125 discrete sites, is visually depicted on Figures 4 and 4A-4F in Attachment A. Table 1 provides a breakdown of the treatment footprint, including individual treatment site location, size, and field survey coverage.

Table 1. Treatment Footprint Site Location, Size, and Field Survey Coverage

Treatment Site	Latitude	Longitude	Size (acres)	2024 Survey Coverage
1	-121.03299217	39.19580358	1.14	100%
2	-121.03164662	39.19435812	0.39	100%
3	-121.02898346	39.19403987	0.97	100%
4	-121.02362724	39.19525230	0.13	100%
5	-121.02267741	39.19505697	0.89	100%
6	-121.01191193	39.19407917	2.98	22%
7	-121.01085717	39.19406954	3.92	40%
8	-121.00987870	39.18922545	9.69	26%
9	-121.00972532	39.18738465	2.79	44%
10	-121.00685939	39.18396320	2.05	92%
11	-121.00491357	39.18215247	12.21	67%
12	-121.00381486	39.18485820	6.33	43%
13	-121.00147150	39.17760088	22.95	60%
14	-120.99691573	39.17424196	3.54	76%
15	-120.99864174	39.17434772	0.20	100%
16	-121.00423662	39.17779341	12.68	47%
17	-121.00408246	39.18220829	2.52	88%
18	-121.00455952	39.18078510	3.88	89%
19	-121.00879129	39.18401142	5.31	1%
20	-121.01085940	39.18710877	4.43	49%
21	-121.01465585	39.19160536	0.28	13%
22	-121.02417106	39.19528664	0.05	100%
23	-121.02549551	39.19491584	0.58	100%
24	-121.03284402	39.19372488	0.83	100%
25	-121.03127867	39.19088352	0.40	100%
26	-121.03109951	39.19111527	0.34	100%
27	-121.02802203	39.19117018	0.31	0%
28	-121.02774719	39.19032636	2.12	71%
29	-121.02676271	39.18941795	0.05	100%
30	-121.02751421	39.18379988	0.14	100%
31	-121.02768977	39.18306079	0.99	96%
32	-121.02698115	39.18228231	0.10	78%
33	-121.02711384	39.18144929	0.22	100%
34	-121.02820630	39.17971943	1.43	68%
35	-121.02936139	39.17811314	4.94	57%
36	-121.02926849	39.17593255	1.49	93%

Table 1. Treatment Footprint Site Location, Size, and Field Survey Coverage

Treatment Site	Latitude	Longitude	Size (acres)	2024 Survey Coverage
37	-121.02905867	39.17292458	0.16	99%
38	-121.02632507	39.15754567	0.14	100%
39	-121.02769655	39.15640870	5.49	50%
40	-121.02970948	39.15340054	0.32	99%
41	-121.02567951	39.14890362	0.71	100%
42	-121.02360434	39.14294791	3.82	75%
43	-121.02180852	39.14172218	0.75	99%
44	-121.02426690	39.14304551	0.59	97%
45	-121.02483141	39.14459499	0.33	99%
46	-121.02601879	39.14704414	0.41	95%
47	-121.02575722	39.14814328	0.02	100%
48	-121.01955346	39.13869992	2.36	96%
49	-121.01900160	39.13545421	0.42	100%
50	-121.01891993	39.13469071	0.29	99%
51	-121.01287446	39.13762458	2.49	100%
52	-121.01209034	39.13791441	0.06	100%
53	-120.99438997	39.13707472	9.16	23%
54	-120.99244433	39.13868406	3.55	99%
55	-120.98841612	39.13949829	3.63	100%
56	-120.99273470	39.14612988	3.42	0%
57	-120.99137221	39.15249597	0.04	0%
58	-120.99366507	39.15436774	2.84	0%
59	-120.99845590	39.15719691	11.15	31%
60	-121.00076311	39.16352428	3.25	65%
61	-120.99717104	39.16604106	1.25	97%
62	-120.99685984	39.16692501	0.05	100%
63	-121.02621300	39.19486131	0.98	92%
64	-120.99857264	39.17844065	0.33	99%
65	-120.99461574	39.17904035	0.01	100%
66	-120.99503217	39.15507912	0.68	0%
67	-121.00221362	39.16304109	1.10	96%
68	-121.02527153	39.19163868	3.02	4%
69	-121.02566542	39.19300695	0.19	67%
70	-121.02919174	39.18364761	1.38	0%
71	-121.02677653	39.16014463	9.67	12%
72	-121.01490519	39.19223552	0.06	100%
73	-121.02597198	39.18624727	2.01	0%
74	-121.02613237	39.18731238	0.41	0%
75	-121.02894743	39.18648678	0.88	0%
76	-121.02559732	39.18868750	0.64	0%
77	-121.02845974	39.18184924	0.13	0%
78	-121.03184950	39.19261058	0.42	100%
79	-121.03163658	39.19206370	0.12	100%
80	-121.02964583	39.19237835	2.10	0%
81	-121.03117157	39.19026203	0.56	73%
82	-121.02925785	39.19050014	0.14	100%
83	-121.02909964	39.18509603	1.17	0%
84	-121.02602729	39.18394807	0.66	0%

Table 1. Treatment Footprint Site Location, Size, and Field Survey Coverage

Treatment Site	Latitude	Longitude	Size (acres)	2024 Survey Coverage
85	-121.02549385	39.18202260	1.34	0%
86	-121.02528561	39.18167096	1.03	0%
87	-121.02764488	39.17624367	1.58	0%
88	-121.02213004	39.19352711	0.91	0%
89	-121.02388880	39.19456990	0.10	0%
90	-121.02149679	39.19474319	1.01	47%
91	-121.02789908	39.18503057	0.65	84%
92	-121.03006104	39.18435261	10.26	0%
93	-121.00433364	39.18347888	1.18	97%
94	-121.02367653	39.16722530	14.18	0%
95	-121.02560391	39.16512494	0.77	0%
96	-121.02512050	39.16328468	2.51	4%
97	-121.00047072	39.15880411	8.71	6%
98	-120.99868477	39.17780865	0.12	100%
99	-121.00311175	39.16349478	3.38	0%
100	-120.99934014	39.16651043	1.93	1%
101	-121.00372597	39.17527306	12.58	0%
102	-120.99943566	39.18021312	2.86	0%
103	-121.02901690	39.16299538	4.81	0%
104	-121.02948025	39.18526170	0.06	0%
105	-120.99194338	39.15155528	8.85	0%
106	-121.02969957	39.18055555	0.84	100%
107	-121.02482642	39.18113359	0.22~~68~~	0%
108	-121.03331024	39.19526935	0.61	100%
109	-121.00962457	39.18660572	2.35	100%
110	-121.00811167	39.18471590	1.78	81%
111	-121.00683678	39.18048764	3.08	98%
112	-120.99129620	39.14560745	2.10	0%
113	-120.99088753	39.15377801	3.84	0%
114	-120.98940111	39.13901373	5.36	40%
115	-121.02774600	39.17849650	2.57	9%
116	-120.99992620	39.17222164	17.24	1%
117	-120.98787833	39.15219017	14.16	0%
118	-120.99801205	39.16273274	11.43	0%
119	-120.99044324	39.13497796	2.63	0%
120	-120.98993009	39.13719619	5.63	35%
121	-121.02011922	39.19598726	1.32	0%
122	-121.01095067	39.19027785	3.57	48%
123	-120.99214530	39.15471613	4.78	0%
124	-120.99247147	39.15350576	0.91	0%
125	-121.01228442	39.19179114	9.34	93%
		Total	**369.15~~61~~**	**34%**

Table 2 provides a matrix of the biological resource recommendations applicable by treatment site, as well as parcel details and treatment types associated with each treatment footprint.

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Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
Cut and Chip – 106 sites														
1	022-210-003 022-210-018 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
2	022-020-027 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
3	012-030-009 022-020-028 022-020-029 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
4	012-020-018 012-020-019 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
5	012-020-017 012-020-018 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
6	012-010-032 012-010-037 012-010-039 012-040-065 012-040-067 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
7	012-040-065 012-040-096 012-040-097 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
8	012-040-050 012-040-056 012-080-057 012-080-058 012-080-066 012-600-036 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
9	012-080-022 012-080-026 012-080-069 012-080-070 ROW	Yes	No	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
10	012-080-031 012-080-034 012-080-053 012-080-059 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
11	012-080-059 012-080-060 012-080-061 012-120-002 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
12	012-080-006 012-080-007 012-080-059 012-080-078 012-080-079 012-210-011 012-210-049 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
13	012-210-011 012-860-001 012-860-002 012-860-003 012-860-009 012-860-010 012-870-001 012-870-002 012-870-008 012-870-009 012-870-011 012-870-019 012-870-020 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
14	012-870-013 012-870-025 028-010-036 028-010-037 028-010-038 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
15	012-870-012 012-870-013	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
16	012-080-078 012-120-003 012-210-011 012-860-001 012-860-003 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
17	012-080-008 012-080-078 012-080-079 012-120-003 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
18	012-080-078 012-080-079 012-120-003 012-120-011 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
19	012-080-046 012-080-071 012-080-072	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
20	012-080-021 012-080-047 012-080-067 012-080-068 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
21	012-600-003 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
23	012-030-012 012-030-034 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
24	022-020-019 022-020-020 022-020-021 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
25	022-690-010 022-690-011 022-690-025 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
26	022-690-014 022-690-015 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
27	012-880-001	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
28	012-880-011 012-880-012 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
29	012-060-064 012-060-081 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
30	012-070-045 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
31	012-070-009 012-070-041 012-070-042 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
32	012-070-008 012-070-009 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
33	012-070-008 012-091-012 012-091-016 012-091-071 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
34	012-091-002 012-091-004 012-091-005 012-091-006 012-091-007	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
35	012-091-004 012-091-005 012-091-007 012-091-008 012-091-009 012-100-019 022-241-054 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
36	012-100-019 012-100-022 012-100-023 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
37	026-010-002 026-010-026	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
39	026-100-006 026-100-011 026-100-012 026-100-018 026-100-021 026-100-028 026-100-029 026-100-031 026-100-033 026-100-034 026-100-037 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
40	023-590-022 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
41	026-280-003 026-280-005 026-320-003 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
42	026-290-002 026-290-006 026-300-003 026-300-007 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
43	026-130-003 026-130-017 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
44	026-120-006 026-130-017 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
45	026-120-005 026-120-006 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
46	026-120-003 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
47	026-120-002 026-120-003 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
48	026-130-008 026-130-009 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
49	026-130-012 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
50	026-150-014 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
51	026-090-006 026-090-040 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
53	028-250-010 028-250-035 028-250-039 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
54	028-250-008 028-250-039 028-250-041 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
55	028-250-033 028-250-046 028-250-047 028-250-048 028-270-049 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
57	028-230-036	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
58	028-230-035 028-230-039 028-230-043	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
60	028-020-002 028-020-051 028-020-052 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
61	028-020-005 028-020-013 028-020-014 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
62	028-020-004	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
63	012-020-021 012-020-022 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
64	012-860-008 012-860-021 012-870-002 012-870-004	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
65	012-222-004 012-222-006 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
66	028-230-042 028-230-043	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
67	028-020-017 028-020-023 028-020-039 028-020-051 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
68	012-030-003 012-880-006	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
69	012-030-003 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
70	012-070-001 012-070-041 022-230-081	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
71	026-070-033 026-070-034 026-070-035 026-070-036 026-070-059 026-070-060	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
72	012-010-010 012-600-003 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
73	012-060-010 012-060-054 012-060-068	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
75	012-060-019 012-060-020 012-060-021 012-060-060	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
76	012-060-016 012-060-064	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
77	012-070-017 012-070-034 012-070-039	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
78	022-020-028 022-690-031 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
79	022-690-014 022-690-031 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
81	022-690-009 022-690-030 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
82	022-690-032 022-690-033 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
83	012-060-020 012-070-001 022-230-081	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
85	012-070-007 012-070-008 012-070-009	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
86	012-070-008 012-091-016	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
87	012-100-019 012-100-020 012-100-022 012-100-023	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
88	012-030-036 012-030-040 012-030-041	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
90	012-010-047 012-020-017 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
91	012-060-021 012-070-002 012-070-027 012-070-044 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
92	022-230-058 022-230-059 022-230-060 022-230-061 022-230-062 022-230-081 022-690-021 022-690-035 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
93	012-080-007 012-080-059 012-080-060 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
95	026-070-002 026-070-052 026-070-053	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
96	026-070-053 026-070-054 026-070-061	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
97	028-230-002 028-230-049 028-230-050	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
98	012-860-008 012-870-002 012-870-019	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
99	026-061-040 026-061-044 028-020-023 028-020-051 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
100	028-010-043 028-020-002	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
101	012-120-003 012-120-011 012-870-001	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
102	012-860-002 012-860-003 012-860-008	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
103	023-540-027 023-550-033 026-070-012 026-070-052 026-070-060	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
104	012-060-020 012-070-001 022-230-081	Yes	No	No	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No
106	012-091-001 012-091-004 022-241-054 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	No	Yes	Yes	No
108	022-020-026 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
112	028-240-006 028-250-017	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
113	028-230-035 028-230-036 028-230-039	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
114	028-250-008 028-250-017 028-250-041 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
115	012-091-007	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
118	028-020-012 028-020-015 028-020-039 028-020-040	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
119	028-250-042 028-250-045	Yes	No	No	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No
120	028-250-008 028-250-009 028-250-042 028-250-045 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No
121	012-010-034 012-010-048 012-010-068 012-010-069 012-010-072	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
122	012-040-050 012-040-056 012-040-096 012-080-058 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
123	028-230-009 028-230-035 028-230-036 028-230-039	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Masticate – 8 sites														
56	028-240-006	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
59	028-230-013 028-230-042 028-230-043 028-230-046 028-230-049 028-230-054	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
80	022-020-029 022-690-031	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
94	026-030-005 026-030-006 026-030-007 026-030-008 026-030-009 026-030-010 026-070-002 026-070-003 026-070-004 026-070-052	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
105	028-230-035 028-230-036 028-230-038 028-240-002 028-240-003 028-240-004	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
116	012-870-012 028-010-026 028-010-027	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
117	028-221-001 028-221-045 028-221-046 028-221-050 028-230-036 028-230-038 028-240-003 028-240-004	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
124	028-230-035	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
Cut, Pile, and Burn – 7 sites														
74	012-060-068	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
84	012-070-045	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
107	012-091-016 ~~012-091-070~~ 012-091-071	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
109	012-080-026 012-080-070 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
110	012-080-048 012-080-071 012-080-072 ROW	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
111	012-080-011 012-120-011 ROW	Yes	No	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
125	012-010-032 012-010-064 012-010-065 012-040-050 012-040-056 012-040-096 012-040-097 012-600-036 ROW	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Lop and Scatter – 4 sites														
22	012-030-013 012-030-014 ROW	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Table 2. Applicable Standard Project Requirements (SPRs) and Related Survey Recommendations by Treatment Area and Type

Treatment Area and Type		Applicable SPRs and Survey Recommendations[1]												
							SPR BIO-7			SPR BIO-10	SPR BIO-10	SPR BIO-10	SPR BIO-12	SPR HYD-4
Treatment Area ID	Parcel Details	SPR BIO-2 (WEAP Training)	SPR BIO-3 (Sensitive Habitat)	SPR BIO-4 (Riparian Habitat)	SPR BIO-5 (Chaparral)	SPR BIO-6 (Plant Pathogens)	Plant Survey (May)	Plant Survey (June)	SPR BIO-9 (Invasive Species)	Aquatic Species Survey	Wildlife Nursery Survey	Bumble Bee Survey	Nesting Bird Survey	Aquatic Resource Flagging
38	026-100-006 026-100-016 026-100-021 026-100-028 026-100-033	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
52	026-090-007	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No
89	012-030-014 012-030-034	Yes	No	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No

Notes: SPR BIO-7 'Plant Survey (May)' includes the following target species in uplands: Spicate calycadenia, Stebbins' morning-glory, Sierra blue grass, oval-leaved viburnum, and Humboldt lily.
SPR BIO-7 'Plant Survey (June)' includes the following target species in uplands: True's mountain jewelflower. All aquatic habitat that could support special-status rare plants will be avoided, so focused survey for wetland plants is necessary.
SPR BIO-10 'Aquatic Species Survey' includes the following target species: California red-legged frog, foothill yellow-legged frog, and northwestern pond turtle.
SPR BIO-10 'Wildlife Nursery Survey' includes the following target species: roosting bats, nesting birds (including American goshawk, Cooper's hawk, and yellow-breasted chat), northwestern pond turtle (nest sites), fisher (dens), ringtail (dens), puma, and deer fawn.

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Appendix D
Cultural Resources Report

Appendix E

Custom Soil Resource Report

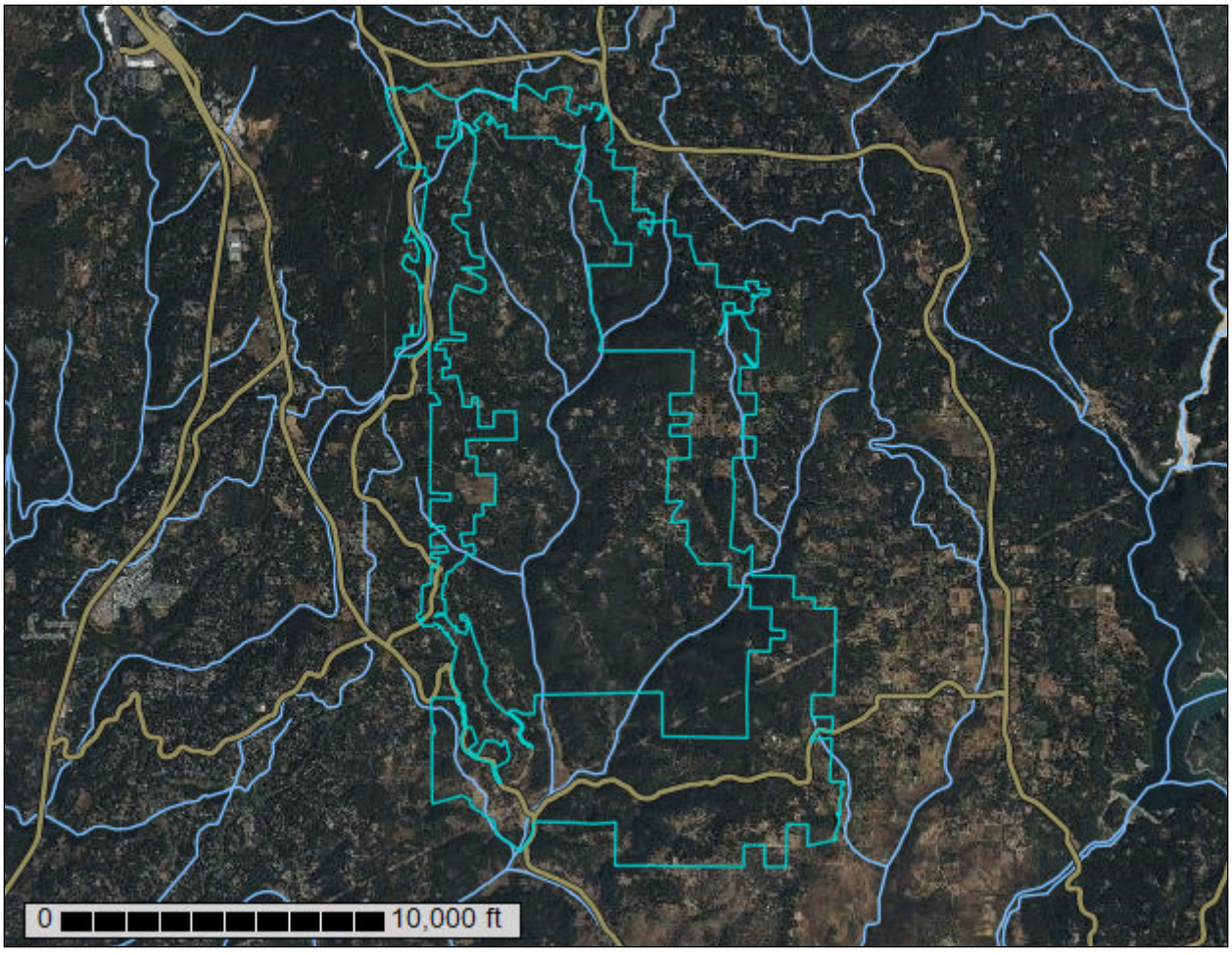
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Nevada County Area, California



February 4, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

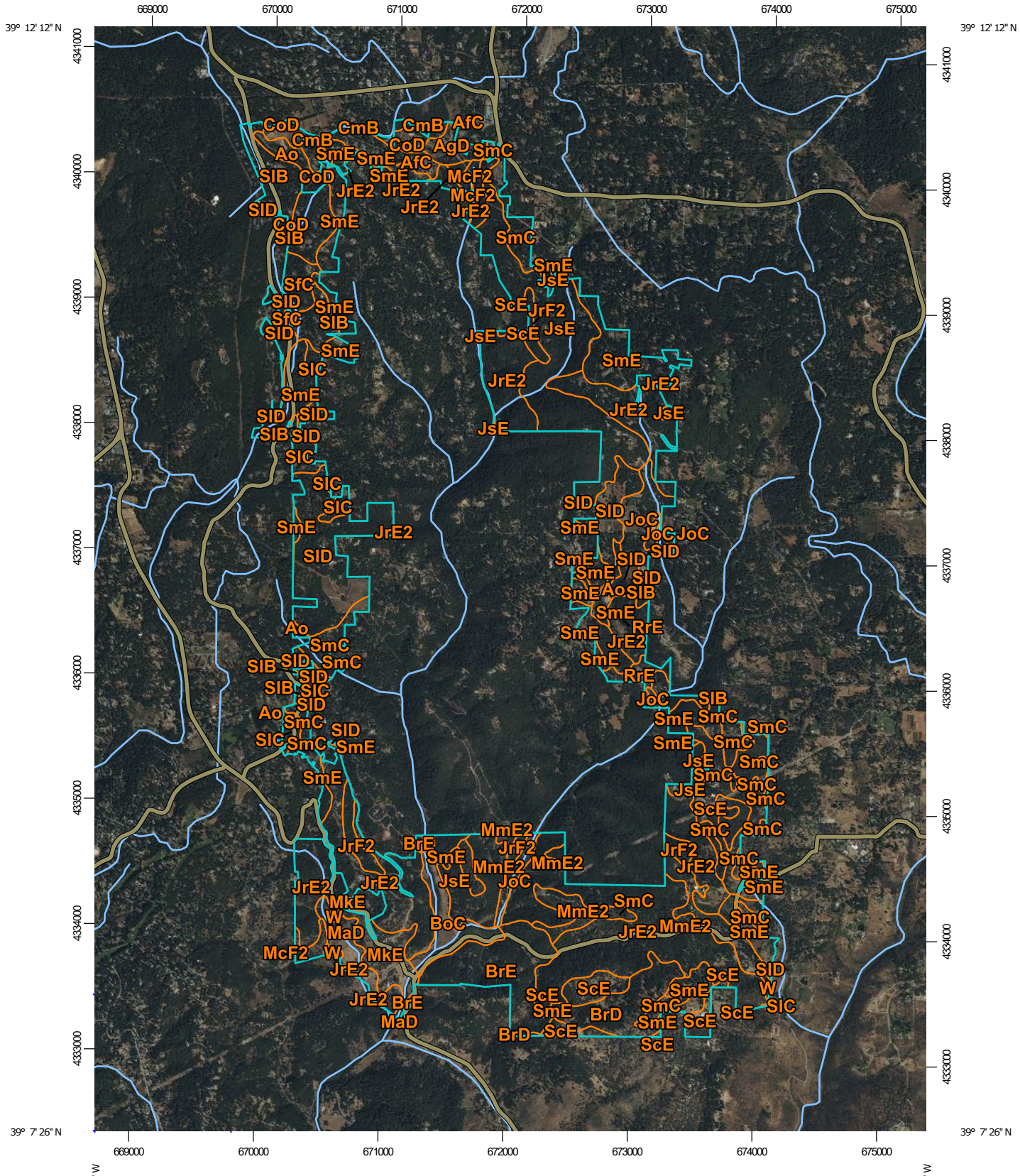
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Nevada County Area, California
Survey Area Data: Version 17, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2023—Sep 8, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AfC	Aiken loam, 9 to 15 percent slopes, high precip	12.6	0.5%
AgD	Aiken cobbly loam, 2 to 30 percent slopes	48.0	1.8%
Ao	Alluvial land, clayey	36.3	1.3%
BoC	Boomer loam, 5 to 15 percent slopes	49.9	1.8%
BrD	Boomer, hard bedrock - Rock outcrop complex, 5 to 30 percent slopes	87.8	3.2%
BrE	Boomer, hard bedrock - Rock outcrop complex, 15 to 60 percent slopes	115.1	4.2%
CmB	Cohasset loam, summits, 2 to 15 percent slopes	14.9	0.5%
CoD	Cohasset cobbly loam, 5 to 30 percent slopes	66.5	2.4%
JoC	Josephine loam, 9 to 15 percent slopes	64.7	2.4%
JrE2	Josephine-Mariposa complex, 15 to 50 percent slopes, eroded	676.0	24.8%
JrF2	Mariposa-Josephine complex, 50 to 75 percent slopes, eroded	54.5	2.0%
JsE	Josephine rock-Outcrop complex, 15 to 50 percent slopes	304.9	11.2%
MaD	Mariposa gravelly loam, 2 to 30 percent slopes	31.9	1.2%
McF2	Mariposa-Maymen complex, 50 to 75 percent slopes, eroded	16.4	0.6%
MkE	Mariposa-Rock outcrop complex, 2 to 50 percent slopes	55.7	2.0%
MmE2	Maymen-Mariposa complex, 2 to 50 percent slopes, eroded	83.5	3.1%
RrE	Rock outcrop-Dubakella complex, 5 to 50 percent slopes	15.9	0.6%
ScE	Secca-Rock outcrop complex, 2 to 50 percent slopes	135.5	5.0%
SfC	Sierra sandy loam, deep, 9 to 15 percent slopes, LRU 18XI	27.0	1.0%
SlB	Sites silt loam, 2 to 9 percent slopes, N low montane	86.6	3.2%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
SIC	Sites silt loam, 9 to 15 percent slopes, N low montane	43.6	1.6%
SID	Sites silt loam, 15 to 30 percent slopes, N low montane	234.1	8.6%
SmC	Sites very stony loam, 2 to 15 percent slopes	112.6	4.1%
SmE	Sites very stony loam, 15 to 50 percent slopes	341.9	12.6%
W	Water	5.6	0.2%
Totals for Area of Interest		**2,721.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Nevada County Area, California

AfC—Aiken loam, 9 to 15 percent slopes, high precip

Map Unit Setting

National map unit symbol: 2x8kv
Elevation: 2,460 to 3,800 feet
Mean annual precipitation: 55 to 65 inches
Mean annual air temperature: 54 to 57 degrees F
Frost-free period: 200 to 225 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Aiken and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aiken

Setting

Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Center third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Lahar deposits derived from conglomerate and/or andesite over residuum weathered from andesite

Typical profile

A - 0 to 29 inches: loam
Bt - 29 to 52 inches: clay loam
BCt - 52 to 64 inches: clay loam
Cr - 64 to 68 inches: bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 48 to 96 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Aiken, cobbly
Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Center third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Cohasset
Percent of map unit: 4 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Center third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Mccarthy
Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Center third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Cohasset, cobbly
Percent of map unit: 3 percent
Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Center third of mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

AgD—Aiken cobbly loam, 2 to 30 percent slopes

Map Unit Setting
National map unit symbol: hfvd
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 48 to 58 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition
Aiken and similar soils: 85 percent

Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aiken

Setting

Landform: Hills
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Colluvium derived from conglomerate and/or cobbly andesitic colluvium derived from tuff and/or residuum weathered from conglomerate and/or tuff

Typical profile

A - 0 to 29 inches: cobbly loam
Bt - 29 to 52 inches: cobbly clay loam
BCt - 52 to 64 inches: cobbly clay loam
Cr - 64 to 68 inches: bedrock

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: 48 to 96 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Cohasset, cobbly loam

Percent of map unit: 3 percent
Landform: Hills
Hydric soil rating: No

Mccarthy, cobbly loam

Percent of map unit: 3 percent
Landform: Hills
Hydric soil rating: No

Cohasset, loam

Percent of map unit: 3 percent
Landform: Hills
Hydric soil rating: No

Aiken, loam
Percent of map unit: 3 percent
Landform: Hills
Hydric soil rating: No

Iron mountain, cobbly loam
Percent of map unit: 3 percent
Landform: Hills
Hydric soil rating: No

Ao—Alluvial land, clayey

Map Unit Setting
National map unit symbol: hfvh
Elevation: 300 to 4,000 feet
Mean annual precipitation: 20 to 48 inches
Mean annual air temperature: 54 to 63 degrees F
Frost-free period: 140 to 265 days
Farmland classification: Not prime farmland

Map Unit Composition
Alluvial land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Alluvial Land

Setting
Landform: Drainageways, flood plains
Parent material: Alluvium derived from mixed metabasic and/or granitic rocks

Typical profile
A - 0 to 6 inches: variable
C - 6 to 60 inches: variable

Properties and qualities
Slope: 0 to 15 percent
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 30 to 60 inches
Frequency of flooding: Occasional

Interpretive groups
Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C
Hydric soil rating: Yes

Minor Components

Alluvial land, riparian
Percent of map unit: 10 percent
Landform: Drainageways, flood plains
Hydric soil rating: Yes

Unnamed, dry
Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: No

BoC—Boomer loam, 5 to 15 percent slopes

Map Unit Setting
National map unit symbol: hfvt
Elevation: 1,000 to 2,200 feet
Mean annual precipitation: 30 to 45 inches
Mean annual air temperature: 56 to 58 degrees F
Frost-free period: 200 to 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Boomer and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boomer

Setting
Landform: Mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from metavolcanics

Typical profile
A - 0 to 18 inches: loam
Bt - 18 to 37 inches: clay loam
C - 37 to 47 inches: loam
R - 47 to 51 inches: bedrock

Properties and qualities
Slope: 5 to 15 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R022AC013CA - LOAMY
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent
Landform: Hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sobrante, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Rescue, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

BrD—Boomer, hard bedrock - Rock outcrop complex, 5 to 30 percent slopes

Map Unit Setting

National map unit symbol: 2w8df
Elevation: 1,360 to 2,310 feet
Mean annual precipitation: 37 to 52 inches
Mean annual air temperature: 57 to 60 degrees F

Frost-free period: 226 to 287 days
Farmland classification: Not prime farmland

Map Unit Composition

Boomer and similar soils: 70 percent
Rock outcrop: 10 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boomer

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Colluvium and/or residuum weathered from igneous and metamorphic rock

Typical profile

A1 - 0 to 2 inches: loam
A2 - 2 to 6 inches: loam
ABt - 6 to 11 inches: loam
Bt1 - 11 to 18 inches: loam
Bt2 - 18 to 29 inches: clay loam
Bt3 - 29 to 37 inches: clay loam
Bt4 - 37 to 47 inches: loam
R - 47 to 57 inches: bedrock

Properties and qualities

Slope: 5 to 30 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 40 to 70 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: R022AF013CA - LOAMY
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex
Across-slope shape: Convex

Typical profile
R - 0 to 4 inches: bedrock

Properties and qualities
Slope: 5 to 30 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Sites, loam
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Josephine, loam
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Rescue, loam
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Sites, very stony loam
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

Sobrante, loam
Percent of map unit: 4 percent
Landform: Hills
Hydric soil rating: No

BrE—Boomer, hard bedrock - Rock outcrop complex, 15 to 60 percent slopes

Map Unit Setting
National map unit symbol: 2w8dh

Elevation: 1,030 to 2,180 feet
Mean annual precipitation: 37 to 48 inches
Mean annual air temperature: 58 to 61 degrees F
Frost-free period: 230 to 303 days
Farmland classification: Not prime farmland

Map Unit Composition

Boomer and similar soils: 65 percent
Rock outcrop: 15 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boomer

Setting

Landform: Canyons, mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave, convex
Across-slope shape: Concave, convex
Parent material: Colluvium and/or residuum weathered from igneous and metamorphic rock

Typical profile

A1 - 0 to 2 inches: loam
A2 - 2 to 6 inches: loam
ABt - 6 to 11 inches: loam
Bt1 - 11 to 18 inches: loam
Bt2 - 18 to 29 inches: clay loam
Bt3 - 29 to 37 inches: clay loam
Bt4 - 37 to 47 inches: loam
R - 47 to 57 inches: bedrock

Properties and qualities

Slope: 15 to 60 percent
Surface area covered with cobbles, stones or boulders: 9.0 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: R022AF013CA - LOAMY
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Canyons, mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex

Typical profile

R - 0 to 4 inches: bedrock

Properties and qualities

Slope: 15 to 80 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Josephine, loam

Percent of map unit: 4 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 4 percent
Landform: Mountains, hills
Hydric soil rating: No

Sobrante, loam

Percent of map unit: 4 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 4 percent
Landform: Mountains, hills
Hydric soil rating: No

Rescue, loam

Percent of map unit: 4 percent
Landform: Mountains, hills
Hydric soil rating: No

CmB—Cohasset loam, summits, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2w8by
Elevation: 2,490 to 4,180 feet
Mean annual precipitation: 48 to 66 inches
Mean annual air temperature: 53 to 58 degrees F
Frost-free period: 100 to 250 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Cohasset and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cohasset

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from volcanic breccia and/or conglomerate

Typical profile

Oi - 0 to 3 inches: slightly decomposed plant material
A1 - 3 to 12 inches: loam
A2 - 12 to 21 inches: loam
BAt - 21 to 32 inches: loam
Bt1 - 32 to 42 inches: clay loam
Bt2 - 42 to 60 inches: clay loam
Crt - 60 to 67 inches: cemented bedrock

Properties and qualities

Slope: 2 to 15 percent
Depth to restrictive feature: 40 to 96 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low (0.01 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.2 to 0.5 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F022AW004CA - Mesic Mountains <40" ppt
Hydric soil rating: No

Minor Components

Mccarthy, cobbly sandy loam
Percent of map unit: 5 percent
Hydric soil rating: No

Aiken, loam
Percent of map unit: 5 percent
Hydric soil rating: No

CoD—Cohasset cobbly loam, 5 to 30 percent slopes

Map Unit Setting
National map unit symbol: hfw9
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 48 to 58 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition
Cohasset and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cohasset

Setting
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Cobbly andesitic colluvium derived from conglomerate

Typical profile
A - 0 to 15 inches: cobbly loam
Bt - 15 to 96 inches: cobbly clay loam
Cr - 96 to 106 inches: bedrock

Properties and qualities
Slope: 5 to 30 percent
Depth to restrictive feature: 42 to 99 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW004CA - Mesic Mountains <40" ppt
Hydric soil rating: No

Minor Components

Cohasset, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Mccarthy, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Aiken, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Iron mountain, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Aiken, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

JoC—Josephine loam, 9 to 15 percent slopes

Map Unit Setting

National map unit symbol: hfws
Elevation: 2,000 to 4,500 feet
Mean annual precipitation: 45 to 55 inches
Mean annual air temperature: 53 to 57 degrees F
Frost-free period: 135 to 235 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Josephine and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Josephine

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum and colluvium from vertically tilted slate, shale and/or contact metamorphic rock

Typical profile

A - 0 to 18 inches: loam
Bt - 18 to 70 inches: silty clay loam
Cr - 70 to 74 inches: bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 40 to 72 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Mariposa, gravelly loam
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, very stony loam
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Josephine, eroded
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Josephine, cobbly
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Cohasset, cobbly loam
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Josephine, undulating
Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, loam
Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

Rock outcrop
Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

Cohasset, loam
Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

JrE2—Josephine-Mariposa complex, 15 to 50 percent slopes, eroded

Map Unit Setting
National map unit symbol: hfwx
Elevation: 2,000 to 4,500 feet

Mean annual precipitation: 45 to 55 inches
Mean annual air temperature: 53 to 57 degrees F
Frost-free period: 135 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Josephine and similar soils: 55 percent
Mariposa and similar soils: 40 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Josephine

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum and colluvium from vertically tilted slate, shale and/or contact metamorphic rock

Typical profile

A - 0 to 12 inches: gravelly loam
Bt - 12 to 50 inches: gravelly clay loam
Cr - 50 to 60 inches: bedrock

Properties and qualities

Slope: 15 to 50 percent
Depth to restrictive feature: 40 to 72 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Mariposa

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

A - 0 to 10 inches: gravelly loam
Bt - 10 to 20 inches: gravelly clay loam
Cr - 20 to 60 inches: bedrock

Properties and qualities

Slope: 15 to 50 percent
Depth to restrictive feature: 15 to 31 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Sites, loam

Percent of map unit: 1 percent
Landform: Hills, mountain slopes
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Landform: Hills, mountain slopes
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 1 percent
Landform: Hills, mountain slopes
Hydric soil rating: No

Maymen, loam

Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

Cohasset, loam

Percent of map unit: 1 percent
Landform: Hills, mountain slopes
Hydric soil rating: No

JrF2—Mariposa-Josephine complex, 50 to 75 percent slopes, eroded

Map Unit Setting

National map unit symbol: hfwy
Elevation: 2,000 to 4,500 feet
Mean annual precipitation: 45 to 55 inches
Mean annual air temperature: 53 to 57 degrees F
Frost-free period: 135 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Mariposa and similar soils: 45 percent
Josephine and similar soils: 35 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mariposa

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

A - 0 to 10 inches: gravelly loam
Bt - 10 to 20 inches: gravelly clay loam
Cr - 20 to 24 inches: bedrock

Properties and qualities

Slope: 50 to 75 percent
Depth to restrictive feature: 15 to 31 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Josephine

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum and colluvium from vertically tilted slate, shale and/or contact metamorphic rock

Typical profile

A - 0 to 12 inches: gravelly loam
Bt - 12 to 50 inches: gravelly clay loam
Cr - 50 to 54 inches: bedrock

Properties and qualities

Slope: 50 to 75 percent
Depth to restrictive feature: 40 to 72 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 10 percent
Landform: Mountain slopes
Hydric soil rating: No

Sites, loam

Percent of map unit: 2 percent
Landform: Mountain slopes
Hydric soil rating: No

Cohasset, cobbly loam

Percent of map unit: 2 percent
Landform: Mountain slopes
Hydric soil rating: No

Iron mountain, cobbly loam

Percent of map unit: 2 percent
Landform: Mountain slopes
Hydric soil rating: No

Sites, very stony loam
Percent of map unit: 2 percent
Landform: Mountain slopes
Hydric soil rating: No

Horseshoe, gravelly loam
Percent of map unit: 2 percent
Landform: Mountain slopes
Hydric soil rating: No

JsE—Josephine rock-Outcrop complex, 15 to 50 percent slopes

Map Unit Setting
National map unit symbol: hfwz
Elevation: 2,000 to 4,500 feet
Mean annual precipitation: 45 to 55 inches
Mean annual air temperature: 53 to 57 degrees F
Frost-free period: 135 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition
Josephine and similar soils: 60 percent
Rock outcrop: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Josephine

Setting
Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum and colluvium from vertically tilted slate, shale and/or contact metamorphic rock

Typical profile
A - 0 to 12 inches: gravelly loam
Bt - 12 to 50 inches: gravelly clay loam
Cr - 50 to 54 inches: bedrock

Properties and qualities
Slope: 15 to 50 percent
Depth to restrictive feature: 40 to 72 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountains, hills
Parent material: Metamorphic rock

Typical profile

R - 0 to 4 inches: bedrock

Properties and qualities

Slope: 15 to 50 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Mariposa, very gravelly loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Unnamed, very steep

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Cohasset, loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 3 percent
Landform: Mountains, hills

Hydric soil rating: No

Cohasset, cobbly loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Unnamed, strongly sloping

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

MaD—Mariposa gravelly loam, 2 to 30 percent slopes

Map Unit Setting

National map unit symbol: hfx0
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Mariposa and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mariposa

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

A - 0 to 10 inches: gravelly loam
Bt - 10 to 20 inches: gravelly clay loam
Cr - 20 to 24 inches: bedrock

Properties and qualities

Slope: 2 to 30 percent
Depth to restrictive feature: 15 to 31 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Josephine, gravelly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Mccarthy, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Iron mountain, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Cohasset, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

McF2—Mariposa-Maymen complex, 50 to 75 percent slopes, eroded

Map Unit Setting

National map unit symbol: hfx1
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Mariposa and similar soils: 50 percent
Maymen and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mariposa

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

A - 0 to 10 inches: gravelly loam
Bt - 10 to 20 inches: gravelly clay loam
Cr - 20 to 24 inches: bedrock

Properties and qualities

Slope: 50 to 75 percent
Depth to restrictive feature: 15 to 31 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Maymen

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Shattered and fractured colluvium derived from slate and/or residuum weathered from slate

Typical profile

A - 0 to 5 inches: gravelly loam
Bw - 5 to 17 inches: gravelly loam
R - 17 to 21 inches: bedrock

Properties and qualities

Slope: 50 to 75 percent
Depth to restrictive feature: 12 to 18 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R022AW005CA - Shallow Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 10 percent
Landform: Mountains, hills
Hydric soil rating: No

Josephine, gravelly loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

MkE—Mariposa-Rock outcrop complex, 2 to 50 percent slopes

Map Unit Setting

National map unit symbol: hfx2
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Mariposa and similar soils: 60 percent
Rock outcrop: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mariposa

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

A - 0 to 10 inches: gravelly loam
Bt - 10 to 20 inches: gravelly clay loam
Cr - 20 to 24 inches: bedrock

Properties and qualities

Slope: 2 to 50 percent
Depth to restrictive feature: 15 to 31 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountains, hills
Parent material: Shale and/or slate

Typical profile

R - 0 to 4 inches: bedrock

Properties and qualities

Slope: 2 to 50 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Sites, very stony loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Cohasset, loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Cohasset, cobbly loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Mccarthy, cobbly loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Iron mountain, cobbly loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

MmE2—Maymen-Mariposa complex, 2 to 50 percent slopes, eroded

Map Unit Setting

National map unit symbol: hfx3
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 140 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Maymen and similar soils: 50 percent
Mariposa and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maymen

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Shattered and fractured colluvium derived from slate and/or residuum weathered from slate

Typical profile

A - 0 to 5 inches: gravelly loam
Bw - 5 to 17 inches: gravelly loam
R - 17 to 21 inches: bedrock

Properties and qualities

Slope: 2 to 50 percent
Depth to restrictive feature: 12 to 18 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R022AW005CA - Shallow Mesic Mountains >40"ppt

Hydric soil rating: No

Description of Mariposa

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metamorphic rock, schist, or slate

Typical profile

A - 0 to 10 inches: gravelly loam
Bt - 10 to 20 inches: gravelly clay loam
Cr - 20 to 24 inches: bedrock

Properties and qualities

Slope: 2 to 50 percent
Depth to restrictive feature: 15 to 31 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW006CA - Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 10 percent
Landform: Mountains, hills
Hydric soil rating: No

Iron mountain, cobbly loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

Mccarthy, cobbly loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

Josephine, gravelly loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

RrE—Rock outcrop-Dubakella complex, 5 to 50 percent slopes

Map Unit Setting

National map unit symbol: hfxh
Elevation: 2,200 to 2,700 feet
Mean annual precipitation: 46 to 54 inches
Mean annual air temperature: 54 to 58 degrees F
Frost-free period: 150 to 235 days
Farmland classification: Not prime farmland

Map Unit Composition

Dubakella and similar soils: 50 percent
Rock outcrop: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dubakella

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Ultrabasic colluvium derived from igneous rock and/or residuum weathered from igneous rock

Typical profile

A - 0 to 10 inches: very gravelly clay loam
Bt - 10 to 21 inches: very cobbly clay
Cr - 21 to 25 inches: bedrock

Properties and qualities

Slope: 5 to 50 percent
Depth to restrictive feature: 20 to 26 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: R022AC059CA - SERPENTINE
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountains, hills
Parent material: Ultrabasic rock

Typical profile

R - 0 to 4 inches: bedrock

Properties and qualities

Slope: 5 to 50 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Boomer

Percent of map unit: 4 percent
Landform: Hills, mountains
Hydric soil rating: No

Secca

Percent of map unit: 3 percent
Landform: Hills, mountains
Hydric soil rating: No

Dubakella, clay loam

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

ScE—Secca-Rock outcrop complex, 2 to 50 percent slopes

Map Unit Setting

National map unit symbol: hfxj
Elevation: 1,700 to 3,000 feet

Mean annual precipitation: 35 to 55 inches
Mean annual air temperature: 57 to 58 degrees F
Frost-free period: 230 to 255 days
Farmland classification: Not prime farmland

Map Unit Composition

Secca and similar soils: 55 percent
Rock outcrop: 25 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Secca

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Basic colluvium derived from igneous and metamorphic rock and/or residuum weathered from igneous and metamorphic rock

Typical profile

A - 0 to 15 inches: gravelly silt loam
Bt1 - 15 to 22 inches: cobbly silty clay loam
Bt2 - 22 to 36 inches: cobbly clay
BCt - 36 to 45 inches: gravelly clay
Cr - 45 to 49 inches: bedrock

Properties and qualities

Slope: 2 to 50 percent
Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Description of Rock Outcrop

Setting

Landform: Mountains, hills
Parent material: Basic igneous and metamorphic rock

Typical profile

R - 0 to 4 inches: bedrock

Properties and qualities

Slope: 2 to 50 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Sites, loam

Percent of map unit: 5 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 5 percent
Landform: Mountains, hills
Hydric soil rating: No

Boomer, loam

Percent of map unit: 5 percent
Landform: Mountains, hills
Hydric soil rating: No

Rescue, loam

Percent of map unit: 5 percent
Landform: Mountains, hills
Hydric soil rating: No

SfC—Sierra sandy loam, deep, 9 to 15 percent slopes, LRU 18XI

Map Unit Setting

National map unit symbol: 2z5kw
Elevation: 430 to 1,820 feet
Mean annual precipitation: 24 to 45 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 245 to 335 days
Farmland classification: Not prime farmland

Map Unit Composition

Sierra and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sierra

Setting

Landform: Hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Residuum weathered from granodiorite

Typical profile

A - 0 to 9 inches: sandy loam
BAt - 9 to 16 inches: sandy loam
Bt - 16 to 35 inches: sandy clay loam
BCt - 35 to 45 inches: sandy clay loam
Cr - 45 to 55 inches: bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 39 to 79 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F018XI205CA - Thermic Granitic Foothills
Hydric soil rating: No

Minor Components

Andregg, coarse sandy loam

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Flanly

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Rock outcrop
Percent of map unit: 3 percent
Landform: Hills
Hydric soil rating: No

Shenandoah
Percent of map unit: 2 percent
Landform: Depressions
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

SlB—Sites silt loam, 2 to 9 percent slopes, N low montane

Map Unit Setting
National map unit symbol: 2w86z
Elevation: 2,020 to 3,080 feet
Mean annual precipitation: 46 to 67 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 210 to 245 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Sites and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sites

Setting
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from metamorphic rock

Typical profile
Oi - 0 to 4 inches: slightly decomposed plant material
A - 4 to 10 inches: silt loam
Bt1 - 10 to 31 inches: silty clay loam
Bt2 - 31 to 65 inches: clay loam
Cr - 65 to 75 inches: bedrock

Properties and qualities
Slope: 2 to 9 percent
Depth to restrictive feature: 39 to 79 inches to paralithic bedrock
Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Mariposa

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Boomer

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Rogerville

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Unnamed, hydric

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Jocal

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

SIC—Sites silt loam, 9 to 15 percent slopes, N low montane

Map Unit Setting

National map unit symbol: 2w86v
Elevation: 2,130 to 3,530 feet
Mean annual precipitation: 51 to 76 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Sites and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sites

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from metamorphic rock

Typical profile

Oi - 0 to 4 inches: slightly decomposed plant material
A - 4 to 10 inches: silt loam

Bt1 - 10 to 31 inches: silty clay loam
Bt2 - 31 to 65 inches: clay loam
Cr - 65 to 75 inches: bedrock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 39 to 79 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Mariposa

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Boomer

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Jocal

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Powellton

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Unnamed, hydric

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

SID—Sites silt loam, 15 to 30 percent slopes, N low montane

Map Unit Setting

National map unit symbol: 2x29d
Elevation: 2,020 to 3,280 feet
Mean annual precipitation: 43 to 64 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 205 to 245 days
Farmland classification: Not prime farmland

Map Unit Composition

Sites and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sites

Setting

Landform: Mountain slopes

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from metamorphic rock

Typical profile

Oi - 0 to 4 inches: slightly decomposed plant material
A - 4 to 10 inches: silt loam
Bt1 - 10 to 31 inches: silty clay loam
Bt2 - 31 to 65 inches: clay loam
Cr - 65 to 75 inches: bedrock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 39 to 79 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Mariposa

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sites, very stony loam

Percent of map unit: 4 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Rock outcrop

Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Jocal

Percent of map unit: 2 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Unnamed, hydric

Percent of map unit: 1 percent
Landform: Mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

SmC—Sites very stony loam, 2 to 15 percent slopes

Map Unit Setting

National map unit symbol: hfxv
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 53 to 57 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Sites and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sites

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Metabasic residuum weathered from metasedimentary rock

Typical profile

A - 0 to 12 inches: cobbly loam
BAt - 12 to 23 inches: cobbly clay loam

Bt - 23 to 68 inches: cobbly clay
BCt - 68 to 78 inches: cobbly clay loam
R - 78 to 82 inches: bedrock

Properties and qualities

Slope: 2 to 15 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: 40 to 80 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Unnamed, severely eroded

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Cohasset, cobbly loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Boomer, loam

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Landform: Hills
Hydric soil rating: No

Mariposa, loam

Percent of map unit: 2 percent
Landform: Hills

Hydric soil rating: No

Cohasset, loam

Percent of map unit: 1 percent
Landform: Hills
Hydric soil rating: No

SmE—Sites very stony loam, 15 to 50 percent slopes

Map Unit Setting

National map unit symbol: hfxw
Elevation: 2,000 to 4,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 53 to 57 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Sites and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sites

Setting

Landform: Mountains, hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Metabasic residuum weathered from metasedimentary rock

Typical profile

A - 0 to 12 inches: cobbly loam
BAt - 12 to 23 inches: cobbly clay loam
Bt - 23 to 68 inches: cobbly clay
BCt - 68 to 78 inches: cobbly clay loam
R - 78 to 82 inches: bedrock

Properties and qualities

Slope: 15 to 50 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: 40 to 80 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: C
Ecological site: F022AW007CA - Deep Mesic Mountains >40"ppt
Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 3 percent
Landform: Mountains, hills
Hydric soil rating: No

Mariposa, loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

Boomer, loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

Sites, loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

Josephine, loam

Percent of map unit: 2 percent
Landform: Mountains, hills
Hydric soil rating: No

Cohasset, cobbly loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

Aiken, cobbly loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

Aiken, loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

Cohasset, loam

Percent of map unit: 1 percent
Landform: Mountains, hills
Hydric soil rating: No

W—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: Unranked

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Appendix F
Hazardous Materials Sites

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

ENVIROSTOR

Tools | Reports | Community Involvement | How to Use EnviroStor | ESI | DTSC Web

PROJECT SEARCH RESULTS

STATUS: All Statuses GO

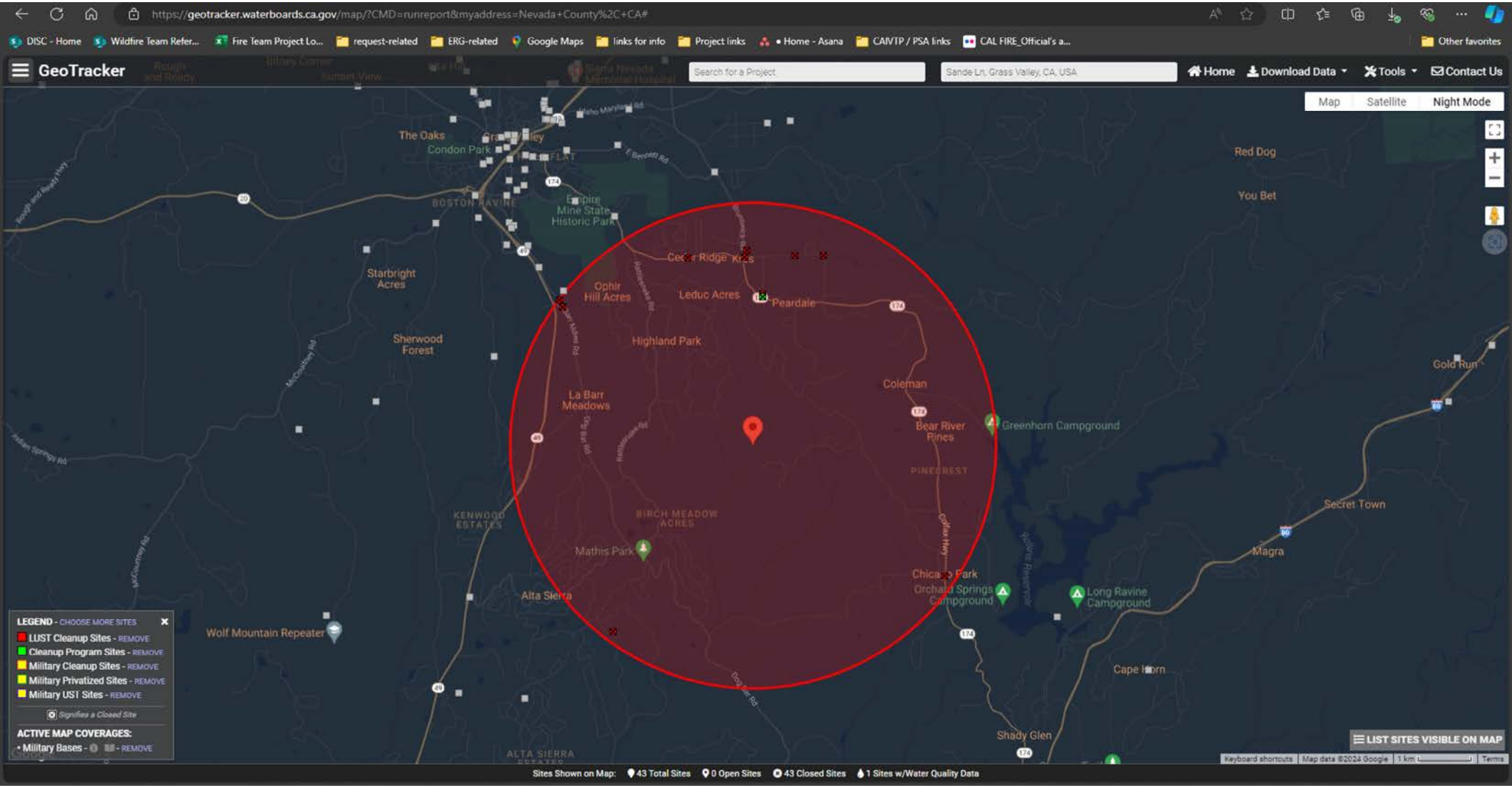
SEARCH CRITERIA: NEVADA, PERMITTED - OPERATING, HISTORICAL NON-OPERATING, POST-CLOSURE PERMITTED

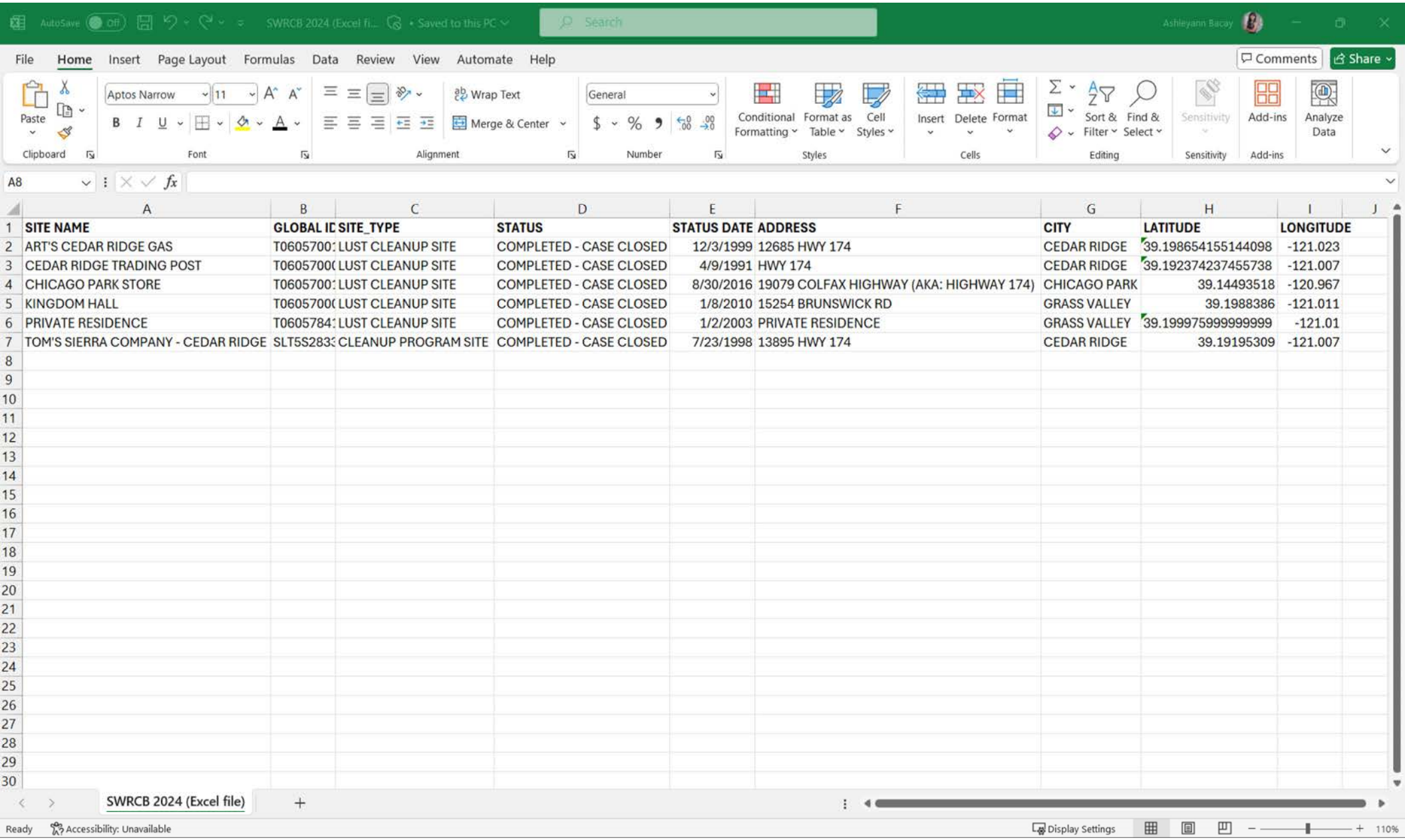
1 RECORDS FOUND EXPORT TO EXCEL PAGE 1 OF 1

		SITE / FACILITY NAME	ESTOR / EPA ID	PROGRAM TYPE	STATUS	ADDRESS DESCRIPTION	CITY	ZIP	CALENVIROSCREEN SCORE	COUNTY
[REPORT]	[MAP]	TEKTRONIX INC	CAD071557029	HAZ WASTE - RCRA	CLOSED	13024 BITNEY SPRINGS RD	GRASS VALLEY	959450000	15-20%	NEVADA

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DISC - Home
Wildfire Team Refer...
Fire Team Project Lo...
request-related
ERG-related
Google Maps
links for info
Project links
• Home - Asana
CAIVTP / PSA links
CAL FIRE_Official's a...
Other favorites
GeoTracker
Search for a Project
Sande Ln, Grass Valley, CA, USA
Home
Download Data
Tools
Contact Us
Map
Satellite
Night Mode
The Oaks
Condon Park
Empire Mine State Historic Park
Red Dog
You Bet
Starbright Acres
Ophir Hill Acres
Leduc Acres
Peardale
Highland Park
Sherwood Forest
La Barr Meadows
Coleman
Bear River Pines
Greenhorn Campground
Gold Run
Secret Town
Magra
Mathis Park
Alta Sierra
Orchard Springs Campground
Long Ravine Campground
Cape Horn
Shady Glen
Wolf Mountain Repeater
LEGEND - CHOOSE MORE SITES
LUST Cleanup Sites - REMOVE
Cleanup Program Sites - REMOVE
Military Cleanup Sites - REMOVE
Military Privatized Sites - REMOVE
Military UST Sites - REMOVE
Signifies a Closed Site
ACTIVE MAP COVERAGES:
• Military Bases - REMOVE
LIST SITES VISIBLE ON MAP
Sites Shown on Map: 43 Total Sites 0 Open Sites 43 Closed Sites 1 Sites w/Water Quality Data



	A	B	C	D	E	F	G	H	I	J
1	**SITE NAME**	**GLOBAL ID**	**SITE_TYPE**	**STATUS**	**STATUS DATE**	**ADDRESS**	**CITY**	**LATITUDE**	**LONGITUDE**	
2	ART'S CEDAR RIDGE GAS	T0605700:	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	12/3/1999	12685 HWY 174	CEDAR RIDGE	39.198654155144098	-121.023	
3	CEDAR RIDGE TRADING POST	T0605700(	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	4/9/1991	HWY 174	CEDAR RIDGE	39.192374237455738	-121.007	
4	CHICAGO PARK STORE	T0605700:	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	8/30/2016	19079 COLFAX HIGHWAY (AKA: HIGHWAY 174)	CHICAGO PARK	39.14493518	-120.967	
5	KINGDOM HALL	T0605700(	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	1/8/2010	15254 BRUNSWICK RD	GRASS VALLEY	39.1988386	-121.011	
6	PRIVATE RESIDENCE	T0605784:	LUST CLEANUP SITE	COMPLETED - CASE CLOSED	1/2/2003	PRIVATE RESIDENCE	GRASS VALLEY	39.199975999999999	-121.01	
7	TOM'S SIERRA COMPANY - CEDAR RIDGE	SLT5S283:	CLEANUP PROGRAM SITE	COMPLETED - CASE CLOSED	7/23/1998	13895 HWY 174	CEDAR RIDGE	39.19195309	-121.007	
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Appendix G

Fuel Break Treatment Plan and Fire Policy

Woodpecker Ravine Shaded Fuel Break Scope of Services

Work shall be performed in accordance with the Scope of Services below and shall adhere to all Standard Project Requirements and Mitigation Measures listed in Table 3.

A. Mastication – 72 acres

Acreage is approximate. Refer to D. General Requirements, Item 1. Refer to Table 3 for restrictions on operations.

Table 1. Mastication treatment specifications.

Tree Removal	• Masticate hardwoods and conifers ≤ 10 inches DBH* and greater than 1 foot tall that fall within the drip line of a tree larger than 10 inches DBH. • Outside the drip line of trees larger than 10 inches DBH, masticate conifers and hardwoods less than 10 inches DBH to achieve an average tree spacing of 17 feet between residual tree boles for a goal of 150 trees per acre.
Brush Removal	• For conifer and hardwood dominated areas, masticate all brush within the Project area. Refer to general instructions for information on retention of certain species. • For shrub-dominated areas – retain patches of brush 100 to 400 square feet in size, spaced 30 feet apart.
Pruning	• Hand prune all residual conifers and hardwoods 6 inches DBH and larger to a height of 8 feet or to 50% live crown, whichever is less. • Trees shall not be pruned with the masticator.
Standing dead tree removal	• Standing dead trees ≤ 10 inches DBH will be felled and processed in one of the ways described in “slash treatment” below. If processing according to “slash treatment” is not feasible, felled dead trees shall be processed according to “dead/downed woody material” below.
Slash treatment	• All material generated by the treatments listed above shall be masticated to a material depth not to exceed 6 inches, with a piece size of 18 inches or less.
Dead/downed woody material	• Existing downed woody debris shall generally be retained where larger than 10 inches in diameter. If existing downed woody debris larger than 10 inches in diameter is not in contact with the ground for a length of 6 feet or more, the log shall be bucked to be put it in contact with the ground where safe and feasible. • Existing dead/down woody debris larger than 1 inch in diameter and ≤ 10 inches in diameter shall be masticated as described in “slash treatment” above. • Dead/downed material that is larger than 10 inches in diameter shall masticated up to the 10-inch diameter point. The smaller diameter piece shall be masticated as

	described in “slash treatment” above. The larger piece shall be left flush with the ground wherever feasible. • Limbs and tops of downed woody debris that protrude higher than 18 inches from the forest floor shall be lopped off up to 10 inches in diameter and masticated as described in “slash treatment” above.
Hand treatment	• Where environmental factors prohibit entry of the masticator, or where masticating could cause residual tree/facility damage, hand work will be required to meet project specifications. This may include areas along fences, rocky areas, near utilities, or areas where tree spacing restricts machine access. Refer to Table 2 for specifications.
Hanging dead branches and boles	• Every effort shall be made to remove hanging/leaning dead boles ≤10 in diameter at the large end AND hanging dead branches and process them according to “slash treatment” above. • If removal is not safe or feasible with the equipment onsite, Contractor shall inform the Registered Professional Forester.
Invasive broom and Himalayan blackberry	• Decontamination of equipment will be required when moving equipment from areas with infestations of invasive broom to other project areas. Refer to Table 3, SPR BIO-9 for requirements related to limiting the spread of invasive plant species.

*DBH = diameter at breast height, measured 4.5 feet above the ground on the uphill side of the tree.

B. Hand Thinning – 298 acres

- Hand Thin and Chip – 280 acres
- Hand Thin and Lop/Scatter – As needed due to slope or access restrictions
- Hand Thin and Pile – 18 acres

Acreages are approximate. Refer to D. General Requirements, Item 1. The hand thinning treatment can be applied to tree and brush dominated areas at all slope classes, though slope restrictions shall apply to tracked chippers. Refer to Table 3.

Table 2. Hand thinning treatment specifications.

Tree Removal	• Using chainsaws, loppers, or other hand tools, cut hardwoods and conifers ≤10 inches DBH and greater than 1 foot tall that fall within the drip line of a tree larger than 10 inches DBH. • Outside the drip line of trees larger than 10 inches DBH, cut conifers and hardwoods less than 10 inches DBH to achieve an average tree spacing of 17 feet between residual trees for a goal of 150 trees per acre.

Brush Removal	• For conifer and hardwood dominated areas, cut brush within the Project area. Refer to general instructions for information on retention of certain species. • For shrub-dominated areas – retain patches of brush 100 to 400 square feet in size, spaced 30 feet apart.
Pruning	• Hand prune all residual conifers and hardwoods 6 inches and larger to a height of 8 feet or to 50% live crown, whichever is less.
Standing dead tree removal	• Standing dead trees ≤10 inches DBH will be felled and processed in one of the ways described in "slash treatment" below. If processing according to "slash treatment" is not feasible, felled dead trees shall be processed according to "dead/downed woody material" below.
Slash treatment	All material generated by the treatments listed above shall be treated by one of the following methods as dictated on project area maps and/or agreed upon with the Registered Professional Forester. • On pre-determined sites, material may be hand piled per the specifications in Item B.1 below. • Refer to D – General Requirements, Item 3. • **Pulling of cut material to the chipper is required where chipper access is not feasible.** Cut material shall be pulled as much as 25 feet uphill and 50 feet downhill. • Material may be chipped using a tracked or tow-behind chipper. Chips shall be spread to a depth no greater than 6 inches. Limitations on equipment use shall apply – refer to Attachment A. • In areas where none of the above options are feasible, material may be lopped and scattered. Lopped material shall not exceed 12 inches in depth, and piece size shall not exceed 30 inches in length.
Dead/downed woody material	• Existing downed woody debris shall generally be retained where larger than 10 inches in diameter. If existing downed woody debris larger than 10 inches in diameter is not in contact with the ground for a length of 6 feet or more, the log shall be bucked to be put it in contact with the ground where safe and feasible. • Dead/downed material larger than 1 inch in diameter and less than 10 inches in diameter shall be processed as described in "slash treatment" above. • Dead/downed material that is larger than 10 inches in diameter shall be lopped off at the 10 inch diameter point. The smaller diameter piece shall be processed as described in "slash treatment" above. The larger piece shall be left flush with the ground wherever feasible.

	• Limbs and tops of downed woody debris that protrude higher than 18 inches from the forest floor shall be lopped off up to 10 inches in diameter and processed as described in “slash treatment” above.
Hanging dead branches and boles	• Every effort shall be made to remove hanging/leaning dead boles ≤10 in diameter at the large end AND hanging dead branches and process them according to “slash treatment” above. • If removal is not safe or feasible with the equipment onsite, Contractor shall inform the Registered Professional Forester.
Firewood	• Where requested by the landowner, Contractor shall leave oak and other desirable firewood in place after hand cutting. Contractor is not required to cut wood into firewood lengths or move firewood to another location. Limbs that protrude higher than 18 inches from the forest floor shall be lopped off and processed as described in “slash treatment” above.
Invasive broom and Himalayan blackberry	• Himalayan blackberry within hand treatment areas shall be hand lopped to a height of 6 inches or less. • Broom within hand treatment areas shall be hand cut and chipped. Broom chips shall be broadcast within the footprint of the original broom stand to prevent the spread of broom to new areas. • Refer to Table 3, SPR BIO-9 for requirements related to limiting the spread of invasive plant species.

B.1. Piling specifications

- Piles shall be built only in those areas shown in the project maps, AND where challenges in slope, topography, access, or environmental compliance preclude the use of the tracked chipper. **Every effort shall be made to chip material where safety, access, and environmental protections allow.**
- Piles shall not exceed 4x4x4 feet and shall be created in areas where they do not pose a threat of igniting residual overstory trees.
- Piles shall be compact to assure appropriate consumption of woody material.
- Material protruding more than 1 foot from the pile shall be trimmed and added to the pile.
- Piles shall be covered with wax paper prior to November 1st.
- Piles shall not be created within stream buffer zones (refer to Attachment A for zone widths).
- Piles shall not be created within 25 feet of a communication or power line.
- Piles shall not be created within the protection zone of an archaeological resource.
- Contractor shall cut a hand line to bare mineral soil around every pile. The hand line should be at least 2 feet in width.

C. Riparian Treatment (All project areas)

The Project area contains Class I, II, III, and IV streams, and a total of approximately 24 acres of Watercourse and Lake Protection Zones (WLPZ, Class I and II streams) and/or Equipment Limitation Zones (ELZs, Class III and IV streams). Stream protections are outlined in Table 3. The following additional treatment specifications shall apply:

1. Watercourses have been classified and will be shown on project maps, which will be provided to the Contractor prior to operations. If Contractor discovers additional watercourses requiring protection during project activities, Contractor will notify the Registered Professional Forester.
2. For Class I and IIs: Equipment may not enter WLPZ areas except at existing built crossings or dry perpendicular crossings as identified by the Registered Professional Forester.
3. For Class IIIs and IVs: Equipment may cross the watercourse at existing built crossings or dry perpendicular crossings as identified by the Registered Professional Forester and may enter ELZs perpendicular to the channel where side slopes are less than 40%. Equipment shall not operate within 10 feet of the bankfull edge of the channel.
4. Dry crossings shall be hydrologically disconnected after use. Refer to Table 3 – Hydrological SPRs.
5. Within WLPZ and ELZs, understory fuels under 4 inches in DBH shall be cut. Treatment should maintain approximately 50% of the existing understory.
6. Pruning, as described in Tables 1 and 2, is required within WLPZ and ELZ areas
7. Vegetation that is growing in stream channels or stabilizing stream banks shall not be cut.
8. Cut fuels within 25 feet of areas accessible with equipment (existing roads or edge of the WLPZ/ELZ) shall be winched or hand-pulled out of the Zone and masticated and/or chipped as described in Tables 1 and 2 under “slash treatment.” Wherever possible, chips and masticated material shall not be broadcast into WLPZ/ELZ areas.
9. Chips and masticated material shall not be broadcast into stream channels. If accidental deposition of woody material occurs, Contractor will remove material from the stream immediately.
10. Excavator-type masticators with a mulching head may reach into WLPZ areas from outside the zone to masticate.
11. All other cut fuels within WLPZ and ELZ areas, including those that are not reachable from outside of the Zone, will be lopped and scattered. Lopped material shall not exceed 12 inches in depth, and piece size shall not exceed 30 inches in length.
12. All treatment in Class IV ELZs (i.e. canals) will be decided upon in consultation with the facility owner. Site-specific protections may apply.
13. Lopping and scattering in watercourse zones shall not be conducted within 200 feet of a structure.
14. Riparian species of any size, including dogwoods, redbuds, maples, elderberry, willow or alder, shall not be cut without approval of the Registered Professional Forester.
15. Hand treatment of watercourse zones within areas mapped as mastication may be required. Watercourse zones that are not treated will be deducted from per-acre payment.
16. Some watercourse zones may not be suitable for treatment due to the density of fuel and the post-treatment depth of lopped and scattered material. Registered Professional Forester will consult with the contractor to develop appropriate treatment in these areas.

D. General Requirements:

1. As of the release of this Task Order, treatments have been identified with the acreages shown above. However, due to the variability of the landscape, it is possible that designated treatment type may slightly fluctuate as designated by the project manager. OES has the option to fund work on approximately 410 acres. Treatment areas may also change depending on landowner participation.
2. Treatments shall adhere to the requirements shown in **Table 3** – Standard Project Requirements (SPRs) and Mitigation Measures. Additional SPRs and Mitigation Measures may be added prior to the start of work. Contractor must also adhere to the requirements outlined in Attachment A – Fire Policy for Operations.
3. Tracked chipping or mastication may extend into the cut/pile areas where slope and environmental restriction allows. Areas where mapped treatments cannot be applied may require lop/scatter treatment. Payment shall be made based on actual treatment as verified by OES or its representatives.
4. Contractor shall participate in a pre-operative meeting to discuss flagging codes, environmental protections, and other project-specific details.
5. Treatments are not planned within 100 feet of structures. No cut material or woody debris shall be left within 100 feet of structures.
6. Do not remove ornamental plants, trees, or shrubs that are part of the landscaping.
7. Do not remove plants marked with pink “Do Not Cut” flagging.
8. Do not remove dogwoods, redbuds, maples, elderberry, willow or alder without approval of the Registered Professional Forester. Retention tree preference shall be as follows in descending order: Blue oak, Black oak, Sugar pine, Pacific madrone, Ponderosa pine, Douglas-fir, Incense cedar. Retention trees should generally be of good form and free of disease or infestation.
9. Chips and masticated material shall not be piled up at the base of residual trees.
10. Trees and brush shall be cut as close to the ground as possible. Residual brush stumps shall not be taller than 4 inches. Residual tree stumps should be as low as possible, but not taller than 8 inches on the uphill side.
11. All cut vegetation shall be kept within the project boundaries. Vegetation falling into ditches, streams, roads, banks, adjacent properties, or trails shall be immediately removed.
12. Work shall not occur outside of project boundaries. If there is a question on location of project boundaries, Contractor shall contact the Registered Professional Forester prior to working in an area where the boundary is not clear.
13. Notes regarding access, special conditions, etc. for private properties shall be included on parcel maps and provided to the Contractor prior to the start of work. Contractor is responsible for referring to these notes and clarifying any questions prior to the start of work.
14. Roads, trails, and other improvements, including but not limited to gates, fences, culverts and/or drainage structures, or signs damaged by Contractor shall be repaired to a like or better condition as found prior to the start of work. Repairs may include repairing or replacing drainage control features. Significant damage to existing roads, trails, or other improvements, caused by Contractor, must be repaired by Contractor at Contractor’s expense within ten (10) working days of notification by OES.
15. The proposed project will occur on private property. No later than 5 PM on Wednesday of each work week, the Contractor is responsible for providing to OES and/or the

Registered Professional Forester a list of the landowner properties that shall be treated in the following week. The Registered Professional Forester will be responsible for notifying landowners of impending work on their property.

16. Encroachment permits and/or traffic control plans may be required to complete project work. Contractor shall be responsible for traffic control and/or encroachment permits, where necessary.
17. Contractor is responsible for renting an outhouse for use during project work where necessary.
18. Coordinate all work as necessary to complete the project, avoid damages to utilities and maintain utility service with each affected utility company.
19. MBG to add general safety requirements

E. Standard Project Requirements and Mitigation Measures

Table 3: Relevant standard project requirements and mitigation measures. "Project proponent" refers to Nevada County OES. Contractor will be responsible for on-the-ground implementation of Standard Project Requirements (SPRs), as required by Nevada County OES and enforced by Mason, Bruce and Girard (Registered Professional Forester). Contractor's foreman or on-site operation manager(s) will be required to attend a mandatory pre-operations training to review relevant SPRs. Contractor must also adhere to the requirements outlined in Attachment A – Fire Policy for Operations.

Administrative SPRs
SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the Contractor will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
Aesthetic SPRs project proponent
SPR AES-1 Vegetation Thinning and Edge Feathering: The Contractor will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.
SPR AES-2 Avoid Staging within Viewsheds: The Contractor will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The Contractor will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
SPR AES-3 Provide Vegetation Screening: The Contractor will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
Air Quality SPRs

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

SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the Contractor will implement the following measures:

- Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol.
- If road use creates excessive dust, the Contractor will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The Contractor will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the Contractor based on soil, traffic, site-specific conditions, and air quality regulations.
- Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The contractor 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.

Archaeological SPRs

SPR CUL-8 Cultural Resource Training: All crew members and contractors implementing treatment activities will attend pre-implementation training 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.

Biological SPRs

SPR BIO-1: Limited operating periods and avoidance areas are in the process of being finalized. Contractor shall be made aware of relevant LOPs and avoidance areas prior to the start of project work.

SPR BIO-2: Require Biological Resource Training for Workers. All crew members and contractors will attend a pre-implementation training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will

immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Contractor is responsible for applying the following treatments in riparian habitats to retain or improve habitat functions:

- Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.
- Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.
- Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.

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

SPR BIO-5: **Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.** The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a

change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).

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

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

- Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.
- The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.

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

SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the Contractor will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):

- clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk;
- include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training;
- minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment;

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

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

SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The Contractor will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife.

- clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;
- for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
- inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;
- stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
- identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include manual or mechanical treatments, 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.

Geologic/Erosion-Related SPRs

SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The Contractor will suspend mechanical 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] treatment activities and all treatment types, including treatment maintenance.

SPR GEO-2 Limit High Ground Pressure Vehicles: The Contractor will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

SPR GEO-3 Stabilize Disturbed Soil Areas: The Contractor will stabilize soil disturbed during mechanical treatments 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 treatment activities could result in substantial sediment discharge from soil disturbed by machinery or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical treatments 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: Mason, Bruce and Girard 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, Contractor will implement relevant measures prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, Mason, Bruce and Girard 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 by the Contractor within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

SPR GEO-5 Drain Stormwater via Water Breaks: The Contractor 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 and manual treatment activities and all treatment types, including treatment maintenance.

Waterbreak Spacing Standards (feet) by trail gradient (% slope)

Erosion Hazard Rating	≤10% Slope	11-25% Slope	26-50% Slope	>50% Slope
Extreme	100	75	50	50
High	150	100	75	50
Moderate	200	150	100	75

Low	300	200	150	100	

SPR GEO-6 Minimize Burn Pile Size: The Contractor will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The Contractor will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.

SPR GEO-7 Minimize Erosion: To minimize erosion, the Contractor will:

(1) Prohibit use of heavy equipment where any of the following conditions are present:
  (i) Slopes steeper than 65 percent.
  (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.
  (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.

(2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to:
  (i) Existing tractor roads that do not require reconstruction, or
  (ii) New tractor roads flagged by the Registered Professional Forester prior to the treatment activity.

(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. Prohibit prescribed herbivory treatments on slopes in excess of 70% (i.e., 35 degrees) and avoid established trails on slopes over 50% (i.e., 27 degrees)

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

Hazardous Materials SPRs

SPR HAZ-1 Maintain All Equipment: The Contractor will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the Contractor will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

SPR HAZ-2 Require Spark Arrestors: The Contractor will ensure that mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.

SPR HAZ-3 Require Fire Extinguishers: The Contractor will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle shall be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.

SPR HAZ-4 Prohibit Smoking in Vegetated Areas: 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.

Hydrological SPRs

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

SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The Registered Professional Forester 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

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

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

Contractor shall follow the following WLPZ protections for all treatments:

- Treatment activities within 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. 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.
  - 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-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the Contractor 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.

Noise Related SPRs

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

SPR NOI-2 Equipment Maintenance: All powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.

SPR NOI-3 Engine Shroud Closure: Engine shrouds shall be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

SPR NOI-5 Restrict Equipment Idle Time: All motorized equipment shall 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.

Transportation SPRs

SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the Contractor will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will

depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

Attachment A - Fire Policy for Operations 2025

The Fire Policy (Policy) applies to all contractors, lessees, permittees, and all other persons and entities who are engaged in vegetation/tree removal for the Woodpecker Ravine Shaded Fuel Break (Project), including all employees and/or subcontractors (collectively, Contractor). This Policy mandates certain equipment to be deployed, procedures to be followed, and preventive measures to be taken depending on the type of activity in which Contractor is engaged.

Compliance with the Public Resources Code - The California Public Resources Code (PRC) contains many provisions to reduce the risk of fire. The PRC is incorporated into this policy by reference – see "State Fire Prevention Laws" below.

Fire Protection Requirements

Red Flag Warnings - Operations will be prohibited during red flag warning periods. Red flag conditions can be checked at: https://www.weather.gov/wrh/CAFW.

Relative Humidity - During periods of the year when burn permits are required or burning is prohibited, mastication operations shall cease when onsite relative humidity is less than 20 percent. During this period a 3-hour on-foot fire patrol will be required following mastication. Chainsaw use and chipping are allowed during this period IF each saw is accompanied by a backpack pump-type fire extinguisher filled with water. A 2-hour on-foot fire patrol will be required following chainsaw usage or chipping. Contractor is responsible for checking relative humidity conditions on site using a Kestrel or similar device.

Fire Patrol – When foot patrol is required as dictated above, the individual conducting the foot patrol shall carry a shovel (> 46", sharp, handle smooth, size O or larger) AND communications equipment capable of summoning additional suppression resources and reporting within 15 minutes to CAL FIRE.

Fire Toolbox (per PRC 4428, included below) - The Contractor will be required to have a sealed fire toolbox onsite, which includes one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and a number of shovels greater than or equal to the number of employees at the operation.

Chainsaw Operators (per PRC 4431, included below) – The Contractor will require all power saw operators to carry a serviceable Underwriters Laboratories (UL) approved fire extinguisher containing a minimum of 14 ounces of fire retardant.

On-site Suppression - When heavy equipment is used for mastication, chipping, transporting, or processing cut material, and during periods of time when burn permits are required or burning is not allowed, a tank truck or trailer or CAFS system will be onsite.

The tank truck or trailer must meet the following requirements:

1. Contain at least 300 gallons of water.
2. Must have a minimum of 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose mounted on live reel attached to pump with

no segments longer than approximately 50 feet, when measured to the extreme ends of the couplings.

3. Shall be capable of applying a minimum of 40 pounds pressure at the nozzle on 300 feet of hose.
4. Shall be capable of being transported throughout the area of operations.

If a CAFS system is used, it must meet the following requirements:

1. The CAFS will be 30 gallons or larger.
2. Variable foam expansion ratio – 10:1 to 20:1.
3. Units shall be kept fully charged with air/water and foam concentrate as recommended by the manufacturer and have the appropriate tools to service the system.
4. The unit shall contain enough energy to empty tank and clear hose prior to exhausting propellant.
5. The unit shall be capable of being completely recharged within 10 minutes.
6. Must have a minimum of 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose

Heavy Equipment (per PRC 4427, included below) - All heavy equipment shall be equipped with 1 shovel (> 46", sharp, handle smooth, size O or larger) AND 1 axe (> 28", > 2 1/2 lbs +, sharp, handle smooth) AND Two 4-A:60-B:C or larger fire extinguishers OR a backpack pump water-type fire extinguisher.

Reporting – Any fires caused by Project operations shall be immediately reported to CAL FIRE, even if the fire has already been suppressed.

Fire Inspections – OES shall conduct an inspection at the start of operations and/or at the beginning of declared fire season to ensure compliance with this Policy. Refer to the Fire Protection Checklist.

State Fire Prevention Laws

Public Resources Code, Division 4, Chapter 6.
4427. Operation of fire causing equipment. During any time of the year when burning permits are required (per PRC § 4423) in an area pursuant to this article, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following:
(a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet.

(b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.
This section does not apply to portable power saws and other portable tools powered by a gasoline-fueled internal combustion engine.

4428. Use of hydrocarbon powered engines near forest, brush or grass covered lands without maintaining firefighting tools. No person, except any member of an emergency crew or except the driver or owner of any service vehicle owned or operated by or for, or operated under contract with, a publicly or privately owned utility, which is used in the construction, operation, removal, or repair of the property or facilities of such utility when engaged in emergency operations, shall use or operate any vehicle, machine, tool or equipment powered by an internal combustion engine operated on hydrocarbon fuels, in any industrial operation located on or near any forest, brush, or grass-covered land between April 1 and December 1 of any year, or at any other time when ground litter and vegetation will sustain combustion permitting the spread of fire, without providing and maintaining, for firefighting purposes only, suitable and serviceable tools in the amounts, manner and location prescribed in this section.
(a) On any such operation a sealed box of tools shall be located, within the operating area, at a point accessible in the event of fire. This fire toolbox shall contain: one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and a sufficient number of shovels so that each employee at the operation can be equipped to fight fire.
(b) One or more serviceable chainsaws of three and one-half or more horsepower with a cutting bar 20 inches in length or longer shall be immediately available within the operating area, or, in the alternative, a full set of timber-felling tools shall be located in the fire toolbox, including one crosscut falling saw six feet in length, one double-bit ax with a 36-inch handle, one sledge hammer or maul with a head weight of six, or more, pounds and handle length of 32 inches, or more, and not less than two falling wedges.
(c) Each rail speeder and passenger vehicle, used on such operation shall be equipped with one shovel and one ax, and any other vehicle used on the operation shall be equipped with one shovel. Each tractor used in such operation shall be equipped with one shovel.
(d) As used in this section:

> *(1) "Vehicle" means a device by which any person or property may be propelled, moved, or drawn over any land surface, excepting a device moved by human power or used exclusively upon stationary rails or tracks.*
> *(2) "Passenger vehicle" means a vehicle which is self-propelled and which is designed for carrying not more than 10 persons including the driver, and which is used or maintained for the transportation of persons, but does not include any motor truck or truck tractor.*

4431. Gasoline powered saws, etc.; firefighting equipment. During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate or cause to be operated in the area any portable saw, auger, drill, tamper, or other portable tool powered by a gasoline fueled internal combustion engine on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, without providing and maintaining at the immediate locations of use or operation of the saw or tool, for firefighting purposes one serviceable round point shovel, with an overall length of not less than 46 inches, or one serviceable fire extinguisher. The Director of Forestry and Fire Protection shall by administrative regulation specify the type and size of fire extinguisher necessary to provide at least minimum assurance of controlling fire caused by use of portable power tools under various

climatic and fuel conditions. The required fire tools shall at no time be farther from the point of operation of the power saw or tool than 25 feet with unrestricted access for the operator from the point of operation.

4442. Spark arresters or fire prevention measures; requirement; exemptions.
(a) Except as otherwise provided in this section, no person shall use, operate, or allow to be used or operated, any internal combustion engine which uses hydrocarbon fuels on any forest-covered land, brushcovered land, or grass-covered land unless the engine is equipped with a spark arrester, as defined in subdivision (c), maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443.
(b) Spark arresters affixed to the exhaust system of engines or vehicles subject to this section shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.
(c) A spark arrester is a device constructed of nonflammable materials specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.
(d) Engines used to provide motive power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code.
(e) Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in effective mechanical condition.

Fire Protection Checklist

CONTRACTOR: _____Project: _____
On-site supervisor name: _____Phone: _____

Fire Tools per PRC			**COMMENTS**
Located close to area of operation	Y	N	
Backpack type fire extinguisher filled with water	Y	N	
2 axes	Y	N	
2 McLeod fire tools	Y	N	
Sufficient # of shovels so that each employee at the operation can be equipped to fight fire	Y	N	
1 or more serviceable chainsaws with at least a 20" bar and 3½ horsepower Note: (or in area of ops)	Y	N	
Tank Truck or CAFS System			**COMMENTS**
Located on project area	Y	N	
Filled with water (Tank truck)	Y	N	
Minimum 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose	Y	N	
In operating condition	Y	N	
Capable of being transported throughout the area of operations	Y	N	
Vehicles			**COMMENTS**
Each vehicle has a shovel and axe	Y	N	
Equipment			**COMMENTS**
All equipment has 1 shovel, 1 axe, AND two 4-A:60-B:C or larger fire extinguishers OR a	Y	N	

backpack pump water-type fire extinguisher			
Chainsaw Operators			**COMMENTS**
Chainsaws equipped with spark arrester	Y	N	
Each chainsaw operator carrying a UL approved min. 14 oz fire extinguisher	Y	N	
Inspection for Fire			**COMMENTS**
Is walking foot patrol being conducted?	Y	N	

Deficiencies shall be corrected immediately and may result in the suspension of operations.

Inspector: _____ Date: _____

_____