THE CALIFORNIA VEGETATION TREATMENT PROGRAM ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1.	**Project Title:**	*Crooks Mountain Ranch VTP*
2.	**CAL FIRE Project Number**	*RX-SOUTH-038-MMU*
3.	**CalVTP I.D. Number**	*2023-08*
4.	**Project Proponent Name and Address:**	*Sebastien Cordier or Brian Mattos* *5366 Hwy 49 North, Mariposa, CA 95338*
5.	**Contact Person Information and Phone Number:**	*Sebastien.Cordier@fire.ca.gov (559) 706-8808* *Brian.Mattos@fire.ca.gov (209) 742-1907*
6.	**Project Location:**	• *Madera County* • *Sec. 26, 27, 34, 35, 36 T06S R20E and Sec. 1, 2 T07S R20E* • *APN: 053-010-019, 055-041-002, 055-041-003, 055-042-002, 055-042-003, 055-042-009, 055-060-001, 055-060-003, 055-072-001, 055-122-001, 055-122-004, and 055-130-080.* • *0.5-mile West of Ahwahnee, CA* • *See Vicinity Map*
7.	**Total Area to be Treated (acres)**	*986 acres*

8. **Description of Project:**

The California Department of Forestry and Fire Protection is proposing broadcast burning, pile burning, manual, and mechanical treatments at Crooks Mountain Ranch. This project is on one participating property owner's land covering 2,415 acres, of which 986 acres are currently planned to be treated.

Three treatment zones and two treatment methods have been identified for this project. The goal to reduce fuel loads via broadcast burning, pile burning, manual and mechanical treatments. As well as improve and maintain a 400-feet shaded fuel break along the ridgeline of Crooks Mountain (200-feet off both sides of centerline), where fire control lines were constructed during the 2021 River Fire Incident. The treatment zones have been selected based off location, topography, and the intended treatment goals. Treatment methods are based off vegetation density, but all treatment methods are proposed to be used in all treatment zones to allow the most flexibility on completing project goals. See Treatment Map below; Section I - Project Maps, #2 for Treatment/Burn Unit Map.

Treatment Methods:
Manual and mechanical treatments will be used to cut and lop ladder fuels such as shrubs, woody debris, and lower tree branches. This treatment will target woody vegetation under 10-inch DBH and ladder fuels up to 10-feet off the ground. This woody debris can then be gathered into burn piles or chipped back onto the ground. This treatment is usually done for all projects and as preparatory work before any prescribed fire activities. The herbaceous annuals vegetation community can recover quickly from mastication treatments by the following year's spring bloom. Manual treatments include work done with hand crews, utilizing hand tools and hand-held power tools. Mechanical treatments include work done with equipment on tires or tracks and with a blade, rake, grapple, chipper, or mastication head attached. Dozers can be used to crush vegetation or create control lines as needed for broadcast burning. Mechanical treatments will generally stay on

slopes less than 50%. When slopes are greater than 50%, project proponent will evaluate treatment area for erosion hazards before mechanical treatments proceed. When erosion hazard is too high on slopes over 50% or when slopes exceed 65%, hand crews will be used. Situational awareness is advised for mechanical operators to get approval on slopes over 50%, to not operate on slopes over 65%, to stay on pre-existing roads as much as possible, and to always operate safely. No healthy, mature, and scenic trees will be removed except for hazard trees. Hazard tree examples such as snags, damaged, and unhealthy trees that pose a dangerous falling threat or that can generate embers during fire.

Broadcast and pile burning can be used to treat the woody debris and understory vegetation. Burn piles will be ignited on permissive burn days, typically in the late fall and winter months. Broadcast burning typically happens in late spring after the blooming period when the vegetation cures and dries out for the summer, but before peak fire season (May or June). Or in late fall, after fire season, before first winter rains begin (October or November). Preparatory work is usually required before a broadcast burn. Such as manual and mechanical treatments to construct control lines, check lines, wet lines, or dozer lines to maintain the broadcast burn within the project perimeter. To the feasible extent, existing roads will be used as control lines to limit the amount of preparatory work required. The vegetation community is well adapted to fire activity and can quickly recover from prescribed fire treatments by the following year's spring bloom.

Treatment Zones:
Treatment Zone 1's vegetation setting is relatively flat oak woodland and grassland habitat with some pine trees. An ArcPro Digital Elevation Model (DEM) slope analysis shows them below 50%. The goal is to burn the understory that is dominated by annual vegetation, thatch, shrubs, and dead fuel buildup. Manual and mechanical work will be implemented first to prep this zone for the prescribed burn. Burning the understory will promote new growth in spring, providing better feed for the cattle. This treatment zone has a higher probability for sensitive resources, such as biology, watercourses, and archaeology. Thus, Equipment Limitation Zones (ELZs) will be placed around known sensitive resources with special treatment flagging, and all CAL FIRE dozer work in this area will be monitored. Areas with sensitive resources at risk of damage from treatments, such as prescribed fire, will be excluded.

Treatment Zone 2 is on the eastern slope of Crooks Mountain. Predominant vegetation is dense overgrowth of trees and shrubs, with little understory vegetation. The goal is to use manual and mechanical equipment to crush and cut the dense vegetation into piles and prepare the area for a broadcast burn. The broadcast burn will burn the remaining understory buildup of vegetation and woody debris. This will open the hillside to promote new growth while reducing wildfire risk. This treatment zone has a lower probability of sensitive resources (such as biology, watercourses, and archaeology), because it is on a hillside slope, no watercourses are in direct proximity, and the overgrown vegetation poses as a block to biological resources. Dozer work will be checked periodically for sensitive resources. Crews will be briefed on sensitive resources, if any are spotted during work they will stop and notify RPF or Environmental Scientist. Once protection measures are properly established, work will continue. An ArcPro DEM slope analysis shows the majority are below 50%. Very few locations are indicated to be above 50% and 65%. Erosion control measures via water bars will be placed after treatments are completed, to avoid hydrological connection with Crooks Creek (downslope, 1,500-feet to the East) and unwanted sedimentary delivery.

Treatment Zone 3 will use mechanical and manual treatments to improve and maintain a 400ft shaded fuel break at the top of Crooks Mountain ridgeline. This section is part of CAL FIRE Madera-Mariposa-Merced Unit's Master Fuel Break plan. Future CAL FIRE work involves extending this shaded fuel break to the North and South along this ridgeline. The Unit's goal is to establish and maintain in perpetuity a continuous shaded fuel break from the Fresno County line to the Tuolumne County line across Madera and Mariposa Counties. Currently, this VTP only includes this property owner's parcels. Vegetation setting is sparse oak woodland with grassland understory component. Chipping and pile burning can take place here, broadcast burning is likely to stop at zone 3's center line for treatment zone 2's broadcast burn. An ArcPro DEM slope analysis shows the majority are below 50%.

9. Treatment Types
   - ☒ Wildland-Urban Interface Fuel Reduction
   - ☒ Fuel Break
   - ☐ Ecological Restoration

10. **Treatment Activities**
   - ☒ Prescribed (Broadcast) Burning, 986 acres
   - ☒ Prescribed (Pile) Burning, 986 acres
   - ☒ Mechanical Treatment, 986 acres
   - ☒ Manual Treatment, 986 acres
   - ☐ Prescribed Herbivory, 0 acres
   - ☐ Herbicide Application, 0 acres

   All treatment activities are allowed for the entirety of this fuel break to allow the most flexibility.

11. **Fuel Type**
   - ☒ Grass Fuel Type
   - ☒ Shrub Fuel Type
   - ☒ Tree Fuel Type

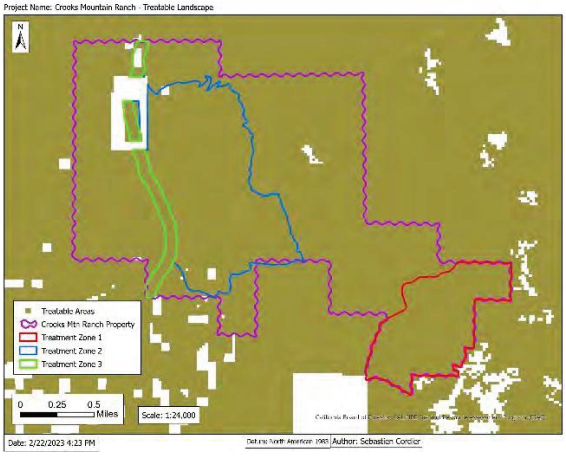
12. **Geographic Scope**
   - ☐ The treatment site is entirely within the CalVTP treatable landscape
   - ☒ The treatment site is NOT entirely within the CalVTP treatable landscape

   The scattered array of acres outside of the CalVTP treatable landscape is due to the method by which the CalVTP treatable landscape was digitally developed and the resultant degree of mapping resolution. Using desktop applications to apply buffers around geographic and topographic features and demarcate jurisdictional boundaries (i.e., State Responsibility Area or SRA and Local Responsibility Area or LRA), the method resulted in some treatable landscape areas that are shown on maps to be disjoined and scattered.

   During site visit we confirmed that there is no difference between the vegetation types inside and outside of the treatable landscape within the project area. If the areas of the proposed project outside of the CalVTP treatable landscape have essentially the same, or at least substantially similar, landscape conditions as the adjacent areas within the treatable landscape, the environmental analysis in the PEIR would be applicable.

   The landscape conditions in the areas outside of the treatable landscape are similar to those within the treatable landscape that are within the project area.

   A few spots along the fuel break are not in the CalVTP treatable landscape. *There is one BLM parcel that will be treated under a separate NEPA document and not under this VTP project.*



13. **Surrounding Land Uses and Setting:**

This project is in Madera County, on the Ahwahnee, Fish Camp, Horsecamp Mountain, and Stumpfield Mountain CA USGS 7.5' Quadrangle Maps. Legal Description is Sec. 26, 27, 34, 35, 36 T06S R20E and Sec. 1, 2 T07S R20E MDB&M. This project is located on Crooks Mountain off Crooks Mountain Ranch. The project is located approximately half mile West of Ahwahnee, CA. To drive there, take Road 619 off Highway 49 outside of Ahwahnee, CA.

This project is located on Crooks Mountain, it includes the ridgeline, the eastern slope face, and a valley bottom further to the east. An ArcPro DEM slope analysis shows slopes are generally less than 50%, with very few locations above 50% and 65%. Project elevation is between 1,916 - 3,512 feet. Crooks Creek intersects the project area. Watersheds: San Joaquin Basin, Fresno River Sub-Basin, and Upper Fresno River Watershed.

This project is in the Central California Foothills, specifically in the Southern Sierran Foothills. The predominant vegetation type is oak woodland, grassland, with shrubs and pine trees. Project area's common species list: deciduous and evergreen oak trees, ponderosa pine, gray pines, manzanita, chamise, red berry shrub, mountain mahogany, and grassland comprised of annual grasses and forbs. The project is in a rural area and used as ranch land for cattle.

14. **Other public agencies whose approval is required**:
No other public agencies approval is required for this project. However, during the development of the project The California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and The Central Valley Regional Water Quality Control Board-Fresno were notified for comments. The San Joaquin Valley Air Pollution Control District will be consulted, and a Smoke Management Plan (SMP) prepared prior to burning operations that require SMP. There is one BLM parcel where we will be working under their existing NEPA in the area adjacent to this VTP project.

15. **Native American Consultation**.
This proposed treatment project is within the scope of the PEIR; therefore AB 52 consultation has been completed. CAL FIRE has completed consultation pursuant to Public Resources Code section 21080.3.1 in preparation of this CalVTP PEIR.

The CAL FIRE Native American Contact List (published July 2022) was used to send project notification letters to the Madera County NACL on 8/30/2022. I.e., Native American Heritage Commission, attention cultural resources representative. Big Sandy Rancheria, attention Elizabeth Kipp. Dumna/Wo-Wah Tribal Government, attention Keith Turner. Dumna Wo-Wah Tribal Government, attention Robert G. Ledger. North Fork Mono Tribe, attention Ron Goode. North Fork Rancheria, attention Elaine Bethel Fink. Picayune Rancheria of Chukchansi, attention Claudia Gonzalez.

The project notification letters request the Native American Groups for any information that they wish to share about cultural resources that exist near or within the project area. This notification

provides them the opportunity to disclose the existence of Native American archaeological or cultural sites that could potentially be affected by the project and the opportunity to submit other comments regarding the project. Project notification letters were sent by US mail and emailed to those who provided email contacts.

See the Confidential Archaeological Addendum for Archaeological Survey Report that was prepared by Environmental Scientist Sebastien Cordier and reviewed by Associate State Archaeologist Denise Ruzicka. All specific site information, mitigations, NACL contact letters and responses are within the Confidential Archaeological Survey Report.

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

Prior to retreating any area within the project boundary, the project proponent will verify that site conditions described in the PSA are still relevant. CAL FIRE's contract with the landowner(s) are for 10 years. After 10 years, the landowner can enter into a new agreement with CAL FIRE, and a new PSA will be developed. If a new contract is not initiated, it is at the discretion of the landowner to maintain the project area if desired.

17. **Standard Project Requirements and Mitigation Measures.**

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

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

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

Explanation:

DETERMINATION (To be completed by the project proponent)

On the basis of this initial evaluation:

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

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

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

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

Signature: DocuSigned by: John Melvin 6569EF653A04422... Date: 4/20/2023

Printed Name: John Melvin Title: Assistant Deputy Director

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CAL FIRE

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the life span of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:
   (Definitions located in Chapter 3 – "Environmental Settings, Impacts, and Mitigation Measures, 3.1.4 – Terminology Used In the PEIR")
   - **Less Than Significant (LTS)** - An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
   - **Less Than Significant *with* Mitigation (LTSM)** - An impact was identified within the PEIR which was viewed in totality as potentially significant and/or significantly unavoidable and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.
   - **Potential Significant (PS)** - An impact treated as if it were a significant impact. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
   - **Potentially Significant and unavoidable (PSU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. "Potentially" is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR
   - **Significantly Unavoidable (SU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
   - **Not applicable (N/A)**

   If the impact is equal to or less than the impact identified in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.
4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.
5. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.

6. Standard Project Requirements (SPR) and Mitigations Measures (MM).
    - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
    - **Implementing Entity**. Most cases this will be CAL FIRE. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., 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**. 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 templet's size. Refer to the approved CalVTP language attached for the full list of requirements.

EC-1: AESTHETICS AND VISUAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	Impact AES-1, 3.2	LTS	SPR AES- 2 SPR AQ- 2, 3 SPR REC-1	Yes	LTS	☒
Due to the temporary nature of treatment activities and incorporation of SPRs, any short-term impacts from treatment activities on aesthetics would remain less than significant.						
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	Impact AES-2, 3.2	LTS	SPR AES- 1 SPR AES- 3 SPR AD- 4 SPR REC- 1	Yes	LTS	☒
Long-term degradation would not be substantial, and impacts would be less than significant.						
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	Impact AES-3, 3.2	SU	MM AES- 3	No	N/A	☒
No non-shaded fuel breaks are proposed for this project; therefore, this impact does not apply.						
Other Impacts to Aesthetics: Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The 2021 River Fire Incident in this area created the fuel break along the ridgeline of Crooks Mountain. We plan to minimize new disturbances and keep within the previous fuel breaks footprints where possible. To reestablish and maintain the fuel break. Thus, no new impacts to aesthetics value will occur from this project and all aesthetic impacts have been analyzed by the PEIR.						

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity

SPR AES-1 Vegetation Thinning and Edge Feathering: This SPR only applies to mechanical and manual treatment activities within all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Resources will thin and feather adjacent vegetation to screen linear edges of the clearing, mimic forms of natural clearings as appropriate, and achieve a natural transitional appearance. *PRIOR – Pre-field work to determine treatment types and boundaries will take into consideration topographical features with the intent to create irregular vegetation densities and treatment area size.* *DURING – Resources performing the treatment work will stay within the established boundaries. If there are areas within the mechanical treatment areas that cannot be completed with the use of equipment due to equipment limitations, they will be treated with manual treatment methods.*			
SPR AES-2 Avoid Staging within Viewsheds: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
Equipment will be staged out of sight to the extent feasible.			
SPR AES-3 Provide Vegetation Screening: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
Resources will preserve sufficient vegetation to screen public views from the treatment area where feasible.			
MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks	No	CAL FIRE N/A	CAL FIRE
No non-shaded fuel breaks are proposed for this project; therefore, this impact does not apply.			

EC-2: AGRICULTURE AND FOREST RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AG-1: Result Directly in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	Impact AG-1, 3.3	LTS	N/A	Yes	LTS	☒
Treatment activities under the CalVTP would not result in the loss of forest land or conversion of forest land to a non-forest use. This impact would be less than significant.						

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

EC-3: AIR QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	Impact AQ-1, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6 MM AQ- 1	Yes	PSU	☒
Use of vehicles, mechanical equipment, and pile burning during treatments would result in emissions of criteria pollutants that could exceed CAAQS or NAAQS thresholds. Emissions of criteria air pollutants related to the proposed treatment are within the scope of the impacts addressed in the PEIR because the proposed activities, as well as the associated equipment and duration of use, are consistent with those analyzed in the PEIR. The components of mitigation measure AQ-1 that have been determined by CAL FIRE to be feasible and would be implemented to reduce emissions include use of gasoline-powered equipment, encouraging carpooling to the project site (dependent on current social distancing requirements), and using Best Available Control Technology for emission reductions of NOX and PM on equipment. Equipment meeting Tier 4 emission standards and the use of renewable fuel would be implemented to the extent feasible.						
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4 SPR NOI- 5	Yes	LTS	☒
Use of vehicles and mechanical equipment during initial and maintenance treatments could expose people to diesel particulate matter emissions. Diesel particulate matter emissions from the proposed treatment project are within the scope of the of the activities and impacts addressed in the PEIR because the burn duration and exposure parameters of the proposed project are consistent with those analyzed in the PEIR.						
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	LTS	SPR AQ- 4, 5	No	N/A	☒
No naturally occurring asbestos (NOA) in the project area, therefore not applicable.						
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	Impact AQ-4, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6	Yes	PSU	☒

Prescribed burning during treatments could expose people to toxic air contaminants. The duration and parameters of the prescribed burn are within the scope of the activities addressed in the PEIR; therefore, the potential for exposure to toxic air contaminants is also within the scope of impacts covered in the PEIR. All feasible measures to prevent and minimize smoke emissions as well as exposure to smoke are included in SPRs. No additional mitigation measures are feasible, and this impact would remain potentially significant and unavoidable, as explained in the PEIR.						
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	Impact AQ-5, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4, 5	Yes	LTS	☒
Use of vehicles and mechanical equipment during treatments could expose people to objectionable odors from diesel exhaust. Objectionable odors from diesel exhaust during the proposed treatment project are within the scope of the impacts covered in the PEIR because the proposed activities, as well as the associated equipment and duration of use, are consistent with those analyzed in the PEIR.						
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	Impact AQ-6, 3.4	PSU	SPR AD- 4 SPR AQ- 2, 6	Yes	PSU	☒
Prescribed burning during treatments could expose people to objectionable odors. The duration and parameters of the prescribed burn are within the scope of the activities addressed in the PEIR; therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. All feasible measures to prevent and minimize smoke odors as well as exposure to smoke odors are included in SPRs. No additional mitigation measures are feasible, and this impact would remain potentially significant and unavoidable, as explained in the PEIR.						
Other Impacts to Air Quality: Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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	CAL FIRE Prior-During	CAL FIRE
The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. The San Joaquin Valley Air Pollution Control District.			
SPR AQ-2 Submit Smoke Management Plan: This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE
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. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. The San Joaquin Valley Air Pollution Control District.			

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	CAL FIRE Prior	CAL FIRE
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 burn plan will be created with input from a qualified technician or certified State burn boss.			
SPR AQ-4 Minimize Dust: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
The project proponent will implement measures to minimize dust with SPR AQ-4.			
SPR AQ-5 Avoid Naturally Occurring Asbestos: This SPR applies to all treatment activities and treatment types.	No	CAL FIRE N/A	CAL FIRE
No naturally occurring asbestos (NOA) in the project area, therefore not applicable.			
SPR AQ-6: Prescribed Burn Safety Procedures: Prescribed burns will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP).	Yes	CAL FIRE Prior-During	CAL FIRE
CAL FIRE requires the burn boss to prepare an incident action plan which identifies burn dates; burn hours; weather limitations; specific burn prescription; communication plan; medical plan; traffic plan; and other special instructions. The Incident Action Plan will also identify personnel to coordinate with the local air district for onsite briefings, posting notifications, and weather monitoring during burning.			
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	CAL FIRE During	CAL FIRE
The components of mitigation measure AQ-1 that have been determined by CAL FIRE to be feasible and would be implemented to reduce emissions include use of gasoline-powered equipment, encouraging carpooling to the project site, and using Best Available Control Technology for emission reductions of NOX and PM on equipment. Equipment meeting Tier 4 emission standards and the use of renewable fuel would be implemented to the extent feasible.			

EC-4: ARCHEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact

Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, 3.5	LTS	SPR CUL-1, 7, 8	Yes	LTS	☒
Vegetation treatment under the CalVTP could occur on lands that contain built historical resources. Implementation of SPRs CUL-1, CUL-7, and CUL-8 would avoid any substantial adverse change to any built historical resources. This impact would be less than significant.						
Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	Impact CUL-2, 3.5	SU	SPR CUL-2, 3, 4, 5, 8 MM CUL- 2	Yes	SU	☒
The potential for treatment activities to result in inadvertent discovery of unique archaeological resources or subsurface historical resources was examined in the PEIR. Treatment activities and extent of ground disturbance of the treatment project are consistent with those analyzed in the PEIR and Mitigation Measure CUL-2 would apply to this treatment.						
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, 3.5	LTS	SPR CUL-1, 2, 3, 5, 6, 8	Yes	LTS	☒
Project treatments have the potential for adverse effects to tribal cultural resources during implementation of the treatments. This impact is within the scope of the of the activities and impacts addressed in the PEIR because the treatment activities and extent of ground disturbance are consistent with those analyzed in the PEIR.						
Impact CUL-4: Disturb Human Remains	Impact CUL-4, 3.5	LTS	N/A	Yes	LTS	☒
Project treatments have the potential for uncovering human remains during implementation of the treatment project. This impact is within the scope of the activities and impacts addressed in the PEIR. Should human remains be discovered the project would comply with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097.						
Other Impacts to Archeological, Historical, and Tribal Cultural Resources: Would the project result in other impacts to archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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	CAL FIRE Prior	CAL FIRE

An Archaeological Records Check Request was conducted on 8/30/2022 and sent to the Southern San Joaquin Valley Information Center, Celeste Thomson. CHRIS replied on 9/12/2022 with the file number 22-341. CHRIS report is within the Confidential Archaeological Addendum.			
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	CAL FIRE Prior	CAL FIRE
Letters identifying the location, treatment types and purpose of the project were sent Native American contacts from the "California Department of Forestry and Fire Protection (CAL FIRE) Native American Contact List, revised July 2022, Madera County (All)" list. The letters requested any information concerning the location of any cultural resources that may exist within the project area. Letters were sent on 8/30/2022 and a second notification on 12/27/2022. NACL contact letters and responses are within the Confidential Archaeological Survey Report.			
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	CAL FIRE Prior	CAL FIRE
Pre-field research included review of site records from the Information Center report, reference materials, and conversations with the landowners. Pre-field research is within the Confidential Archaeological Survey Report.			
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
A Confidential Archaeological Survey Report was prepared by Sebastien Cordier (CAL FIRE Environmental Scientist) and reviewed by Denise Ruzicka (CAL FIRE Associate State Archaeologist). Refer to the attached Confidential Archaeological Survey Report for the discussion on specific cultural resources and a list of potential effects and proposed protection measures.			
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, a 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	CAL FIRE Prior-During	CAL FIRE
For identified cultural resources that cannot be avoided, effective protection measures have been developed. CAL FIRE archaeologist and culturally affiliated tribes are consulted. Protection measures are developed to avoid damaging effects from treatments. Normally, CAL FIRE VTP projects can avoid all cultural resources identified within the treatment area with protection measures. All cultural resource site's protection measures and tribal contacts are within the Confidential Archaeological Survey Report.			
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	CAL FIRE During	CAL FIRE

For identified tribal cultural resources that cannot be avoided, effective protection measures have been developed. CAL FIRE archaeologist and culturally affiliated tribes are consulted. Protection measures are developed to avoid damaging effects from treatments. Normally, CAL FIRE VTP projects can avoid all cultural resources identified within the treatment area with protection measures. All cultural resource site's protection measures and tribal contacts are within the Confidential Archaeological Survey Report.			
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
The CAL FIRE archaeologist was consulted when built historical resources were identified within the project area. Treatments within 100 feet of built historical resources will occur after the CAL FIRE archaeologist approves. Historical resources and their protection measures are within the Confidential Archaeological Survey Report.			
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
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).			
MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified professional archaeologist or CAL FIRE archeological trained Registered Professional Forester will assess the significance of the find.	Yes	CAL FIRE Prior-During	CAL FIRE
The qualified CAL FIRE archaeologist, will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures.			

EC-5: BIOLOGICAL RESOURCES

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

			1, 3, 4, 5, 7 SPR HYD-5 MM BIO-1a, 1b, 1c			
Project activities could result in direct or indirect adverse effects to special-status plant species because suitable habitat is present. However, the potential for adverse effects from implementing project activities, their impacts, and their intensity of disturbance onto special-status plant species is addressed and consistent with those analyzed within the scope of the Program Environmental Impact Report (PEIR). See relevant SPRs and MMs sections that apply to Impact BIO-1. With their implementation, Impact BIO-1 would be less than significant with mitigation and consistent with the determination in the PEIR.						
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, 3.6	PS / SU	SPR BIO-1, 2, 3, 4, 5, 8, 10, 11 SPR HYD-1, 3, 4, 5 SPR HAZ-5, 6 MM BIO-2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4	Yes	LTSM	☒
Project activities could result in direct or indirect adverse effects to special-status wildlife species because suitable habitat is present. However, the potential for adverse effects from implementing project activities, their impacts, and their intensity of disturbance onto special-status wildlife species is addressed and consistent with those analyzed within the scope of the Program Environmental Impact Report (PEIR). See relevant SPRs and MMs sections that apply to Impact BIO-2. With their implementation, Impact BIO-2 would be less than significant with mitigation and consistent with the determination in the PEIR.						
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	Impact BIO-3, 3.6	PS	SPR BIO-1, 2, 3, 4, 5, 6, 8, 9 SPR HYD-4, 5 MM BIO-3a, 3b, 3c	Yes	LTSM	☒
Project activities could result in direct or indirect adverse effects to sensitive habitats, including designated sensitive natural communities, riparian habitats, and oak woodlands. However, the potential for adverse effects from implementing project activities, their impacts, and their intensity of disturbance onto sensitive habitats through direct loss or degradation that leads to loss of habitat function is addressed and consistent with those analyzed within the scope of the Program Environmental Impact Report (PEIR). See relevant SPRs and MMs sections that apply to Impact BIO-3. With their implementation, Impact BIO-3 would be less than significant with mitigation and consistent with the determination in the PEIR.						

Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, 3.6	PS	SPR BIO-1 SPR HYD-1, 3, 4, MM BIO- 4	No	N/A	☒
After SPR BIO-1's review, no state or federally protected wetlands are in the project treatment area. Therefore, Impact BIO-4 is not applicable to this project.						
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	Impact BIO-5, 3.6	PS	SPR BIO-1, 4, 5, 10, 11 SPR HYD-1, 4 MM BIO- 5	No	N/A	☒
After SPR BIO-1's review, no known wildlife movement corridors, nursery sites, or indications of nursery sites were identified in the treatment area. Therefore, Impact BIO-5 is not applicable to this project.						
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	Impact BIO-6, 3.6	LTS	SPR BIO-1, 2, 3, 4, 5, 12	Yes	LTS	☒
Project activities could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife because suitable habitat is present in the treatment area. However, the potential for adverse effects from implementing project activities, their impacts, and their intensity of disturbance onto common wildlife resulting in reduction of habitat or abundance is addressed and consistent with those analyzed within the scope of the Program Environmental Impact Report (PEIR). See relevant SPRs sections that apply to Impact BIO-6. With their implementation, Impact BIO-6 would be less than significant with mitigation and consistent with the determination in the PEIR.						
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, 3.6	No Impact	SPR AD- 3	No	N/A	☒
After SPR BIO-1's review, project activities have no conflicts with local policies or ordinances protecting biological resources. Therefore, Impact BIO-7 is not applicable to this project.						
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	Impact BIO-8, 3.6	No Impact	N/A	No	N/A	☒
After SPR BIO-1's review, the project treatment site is not within any adopted HCP, NCCP, or other approved habitat plan. Therefore, Impact BIO-8 is not applicable to this project.						
Other Impacts to Biological Resources: Would the project result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR BIO-1: Review and Survey Project-Specific Biological Resources.	Yes	CAL FIRE Prior	CAL FIRE
1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.**	Yes		
2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**.	No		
This SPR applies to all treatment activities and treatment types.			
The California Natural Diversity Database (CNDDB) was viewed to determine presence of any known occurrences of rare, federal, or state endangered/threatened (or candidate for listing thereof), sensitive, or other specially listed species of concern. A CNDDB 12-mile search was completed because this project rests on four quad corners returning a 16-quad list of species that would not be in the area, and a 12-mile search area is comparable to the 9-quad. A CNDDB 12 miles search was completed in September 2022 and returned 39 species of special status. Comprised of 13 annual herbs, 10 perennial herbs, and 16 wildlife species. From the 39 species of special status returned, 17 were ruled off the project because the project area does not match the species habitat preferences via Elevation, Habitat, WLPZ, Soils, and Other Reasons. Of the 22 remaining species that have potential to be present on project, there are 9 annual herbs, 6 perennial herbs, and 7 wildlife species. *At the end of "EC-5 Biological Resources" section, special-status plant and wildlife summary tables are available. The summary table contains each species, their status, habitat description, potential to be within the project area, and their avoidance strategy. Additionally, see SPR-7, SPR-10, MM BIO-1a/1b, and MM BIO-2a/2b.* *The Sierra Nevada Foothills ecoregion species list are provided in Appendix BIO-3, Table 14a, and 14b in the PEIR (Volume II). Ecoregion special-status species include plants, amphibians, birds, invertebrates, mammals, and reptiles. Due to the large number of special-status wildlife species considered in this analysis, species are grouped into life history categories (or guilds) that would respond similarly to the range of proposed treatment activities. The grouped guilds are categorized as follows: wildlife that use tree, cavity, shrub, or ground for nesting, burrowing or denning wildlife, insects and other terrestrial invertebrates, bats, ungulates, fish and aquatic invertebrates, amphibians, and reptiles. Each life history guild has a combination of SPRs and MMs to protect them from adverse impacts caused by treatment activities. Table 3.6-33 in the PEIR shows applicable SPRs, the potential impacts to each life history guild, and their associated MMs. To protect all these species, Impact BIO-1 for plants and Impact BIO-2's life history categories will be utilized with all their applicable SPRs and MMs. Impact BIO-2's life history guild will cover all of the ecoregions special-status wildlife list, matching to their relevant SPRs and MMs. All special-status species from the ecoregion's list are protected and avoided from significant impacts with applicable SPRs and MMs.* *Prior to the project start date, biological surveys will look for all special status botanical and wildlife species that could be impacted by project activities. If any species of special status are found, they will be excluded from project activities that could cause them a disturbance with either timing avoidance, or buffer zones with flagging. Surveys on 9/22/2022, 10/11/2022, 10/12/2022, and 12/15/2022 identified no*			

special status species. Additional surveys will be conducted in Spring 2023, throughout the floristic season prior to treatment implementation. *CAL FIRE contacted CDFW, RWQCB, and USFWS to discuss biological resources on 11/8/2022. CDFW replied on 01/25/2023. RWQCB replied on 11/16/2022, and USFWS replied on 11/18/2022. See attached email replies from agencies.* *After review and survey of project-specific biological resources, suitable habitat is present but adverse effects can be clearly avoided. All Impact BIOs adhere to SPR BIO-1; specific avoidances for plant and wildlife species can be found in relevant SPRs and MMs sections below.*			
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	CAL FIRE Prior-During	CAL FIRE
Worker Environmental Awareness Program trainings will be given to crews prior to and during treatment activities, informing them of sensitive biological resources and proper avoidance measures in the treatment area. Crews will be trained on special-status plants and wildlife species, sensitive habitats, and common species that may be present in the treatment area. Crews will also be trained on the identification of invasive species or plant pathogens to prevent their spread into or out of this project area (SPR BIO-6 and BIO-9).			
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.	No	CAL FIRE N/A	CAL FIRE
After SPR BIO-1 review, no sensitive natural communities or sensitive habitats were present or observed in the project treatment site. Therefore, SPR BIO-3 is not applicable to this project.			
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	CAL FIRE During	CAL FIRE
Crooks Creek, Class II watercourse, intersects the project area. A Watercourse and Lake Protection Zone (WLPZ) of 50-feet will be placed around Crooks Creek. Treatments in riparian habitats will retain or improve habitat functions as per SPR BIO-4 in the CalVTP PEIR.			
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	CAL FIRE During	CAL FIRE
The project proponent will design treatment activities to avoid type conversion where chaparral is present and seek to maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function.			
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement best management practices to prevent the	Yes	CAL FIRE Prior	CAL FIRE

spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle). This SPR applies to all treatment activities and treatment types.			
Personnel utilized on this project will be advised of the need to ensure equipment coming to or leaving the project area is properly washed. It is most likely that personnel and equipment assigned to work on the project will be from the local area and the concern of pathogens entering from other areas will be low. However, because Fire Crews, Fuels Crews, associated equipment (chainsaws, hand tools, etc.), and vehicles could have been used in other portions of the state, either on fires or other fuel treatment projects, the crews will be advised to completely clean their equipment, tools, and vehicles before arriving at and leaving the project site.			
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
SPR BIO-1 determined that suitable habitat for special-status plant species is present. Thus protocol-level surveys were conducted prior to treatment activities. Treatment Zone 1 is a grassland habitat with Oak trees and Crooks Creek. Treatment Zone 2 is the eastern hill side of Crooks Mountain, covered with dense shrubs and tree habitat. Treatment Zone 3 is the ridgeline of Crooks Mountain, with a mix of grassland and Oak tree habitat. All Treatment Zones were surveyed, the most suitable habitat locations being in Zone 1 and 3, and they received the most survey coverage. Treatment Zone 2 has steeper slopes and dense woody vegetation, thus less suitable habitat for special-status plants and making survey infeasible. No special-status plants were found from the previous surveys, the latest being on 12/15/2022. Additional surveys will be conducted in Spring 2023, throughout the floristic season prior to treatment implementation. Additional post surveys will be completed after treatments and when better access to Zone 2 is established. If special-status plant species listed under CESA or ESA are found in the future, they will be protected under MM BIO-1a. If special-status species not listed under CESA or ESA are found in the future, they will be protected under MM BIO-1b. At the end of "EC-5 Biological Resources" section there is a special-status plant summary table that contains the CNDDB's returned plant species, status, habitat description, potential to be within the project area, and avoidance strategy. If any other special-status plant species are found during surveys, they will be protected under MM BIO-1a/1b.			
SPR BIO-8: Identify and Minimize Impacts in Coastal Zone ESHAs. This SPR applies to all treatment activities and only the ecosystem restoration treatment type.	No	CAL FIRE N/A	CAL FIRE
No coastal zone ESHAs exist in the project treatment area. Therefore, SPR BIO-8 is not applicable to this project.			
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Post	CAL FIRE
Personnel utilized on this project will be advised of the need to ensure equipment coming to or leaving the project area is washed and picked clean of seeds. Invasive plants disperse and cling very well onto crews' boots and pants. All personnel on site will need to pick their boots and pants to clean off any seeds attached before arriving and after leaving the project site. It is likely that personnel and equipment assigned to work on the project will be from the local area and the concern of invasive weeds entering from other areas will be low. However, because Fire Crews, Fuels Crews, associated equipment (chainsaws, hand tools, etc.) and vehicles could have been used in			

other portions of the state, either on fires or other fuel treatment projects, the crews will be advised to completely clean their equipment, tools, clothing, and vehicles before arriving and after leaving the project site.			
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	CAL FIRE Prior-During	CAL FIRE
SPR BIO-1 determined that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present. Thus, focused surveys were conducted prior to treatment activities. Treatment Zone 1 is a grassland habitat with Oak trees and Crooks Creek. Treatment Zone 2 is the eastern hill side of Crooks Mountain, covered with dense shrubs and tree habitat. Treatment Zone 3 is the ridgeline of Crooks Mountain, with a mix of grassland and Oak tree habitat. All Treatment Zones were surveyed, the most suitable habitat locations being in Zone 1 and 3, and they received the most survey coverage. Treatment Zone 2 has steeper slopes and dense woody vegetation, thus less suitable habitat for special-status wildlife and making survey infeasible. No special-status wildlife was found from the previous surveys, the latest being on 12/15/2022. Additional surveys will be conducted in Spring 2023, throughout the floristic season prior to treatment implementation. Additional post surveys will be completed after treatments and when better access to Zone 2 is established. If special-status wildlife species listed under CESA or ESA are found, they will be protected under MM BIO-2a. If special-status species not listed under CESA or ESA are found, they will be protected under MM BIO-2b. At the end of "EC-5 Biological Resources" section there is a special-status wildlife summary table that contains the CNDDB's returned wildlife species, status, habitat description, potential to be within the project area, and avoidance strategy. If any other special-status wildlife species are found during surveys, they will be protected under MM BIO-2a/2b.			
SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). This SPR applies only to prescribed herbivory and all treatment types.	No	CAL FIRE N/A	CAL FIRE
No prescribed herbivory will be used on this project, so no fencing would be installed. Therefore, SPR BIO-11 is not applicable to this project.			
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	CAL FIRE Prior-During	CAL FIRE
SPR BIO-12 will be implemented to avoid adverse effects to nesting birds. Active nesting season is typically between March 15th to September 15th. If treatment activities cannot be scheduled to fully avoid the active nesting season, a survey for nesting birds will be conducted as described in SPR BIO-12. If active nests are observed, disturbance to the nest will be avoided by establishing an appropriate buffer around the nest, modifying treatments to avoid disturbance to the nest, or deferring treatment until the nest is no longer active. This protects birds from the ecoregion list and raptors.			

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	CAL FIRE Prior-During	CAL FIRE
Special-status plant species listed under ESA or CESA were found from SPR BIO-1's review. Of the 23 special-status plant species returned from the CNDDB 12-mile search, 5 are listed under ESA or CESA. The 5 listed plant species have the potential to inhabit the project area. SPR BIO-7 directs protocol-level surveys to be completed for the remaining species, since they have the potential to exist within the project. If any special-status plant species that are listed under ESA or CESA are found during surveys, an avoidance strategy will be implemented as per MM BIO-1a. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.			
MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement measures to avoid loss of individuals and maintain habitat function of occupied habitat.	Yes	CAL FIRE Prior-During	CAL FIRE
Special-status plants not listed under ESA or CESA were found during SPR BIO-1 review. Of the 23 special-status plant species returned from the CNDDB 12-mile search, 18 are not listed under ESA or CESA. Eight of the not listed plant species were ruled off the project because the species habitat preferences do not match the habitat in the project area or can be avoided. The 10 remaining species have the potential to inhabit the project area. SPR BIO-7 directs protocol-level surveys to be completed for those species, since they have the potential to exist within the project. If any special-status plant species that are not listed under ESA or CESA are found during the surveys, an avoidance strategy will be implemented as per MM BIO-1b. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.			
MM BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.	No	CAL FIRE N/A	CAL FIRE
All listed and non-listed special-status plants can feasibly be avoided as specified under the circumstances described under MM BIO-1a and MM BIO-1b. No significant impacts are expected, and no unavoidable loss of special-status plants will occur. MM BIO-1c is not applicable to this project.			

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	CAL FIRE Prior-During	CAL FIRE
Special-status wildlife species listed under ESA or CESA were found under SPR BIO-1's review. Of the 16 special-status wildlife species returned from the CNDDB 12-mile search, 7 are listed under ESA or CESA. Six of the listed wildlife species were ruled off the project because the species habitat preferences do not match the habitat in the project area or can be avoided. The 1 remaining species has the potential to inhabit the project area. SPR BIO-10 directs focused or protocol-level surveys to be completed for those species, since they have the potential to exist within the project. If any special-status wildlife listed under ESA or CESA are found during the surveys, an avoidance strategy will be implemented as per MM BIO-2a. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.			
MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.	Yes	CAL FIRE Prior-During	CAL FIRE
Special-status wildlife species not listed under ESA or CESA were found during SPR BIO-1 review. Of the 16 special-status wildlife species returned from the CNDDB 12-mile search, 9 are not listed under ESA or CESA. Three of the not listed wildlife species were ruled off the project because the species habitat preferences do not match the habitat in the project area or can be avoided. The 6 remaining species have the potential to inhabit the project area. SPR BIO-10 directs focused or protocol-level surveys to be completed for those species, since they have the potential to exist within the project. If any special-status wildlife species not listed under ESA or CESA are found during the surveys, an avoidance strategy will be implemented as per MM BIO-2b. See special-status plants summary tables at the end of "EC-5 Biological Resources" for reasonings and avoidance strategy.			
MM BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities) If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.	No	CAL FIRE N/A	CAL FIRE

No significant mortality, injury, disturbance, or loss of habitat function for special-status wildlife is expected and can feasibly be avoided as specified under the circumstances described in MM BIO-2a and MM BIO-2b. No significant impacts are expected, and no unavoidable loss of special-status wildlife or habitat will occur. Thus, Mitigation Measure BIO-2c is not applicable to this project.			
MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)	No	CAL FIRE N/A	CAL FIRE
The Valley Elderberry Longhorn Beetle (VELB) (Desmocerus californicus dimorphus) is in the CNDDB 12-mile search results. However, the project area is outside the critical habitat range and the current documented range of the VELB. Therefore, MM BIO-2d is not applicable to this project. *References:* *1) https://ucanr.edu/sites/Elderberry/Growing/VELB/* *2) https://www.fws.gov/species/valley-elderberry-longhorn-beetle-desmocerus-californicus-dimorphus*			
MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.	No	CAL FIRE N/A	CAL FIRE
No special-status butterflies were identified from SPR BIO-1. Thus, MM BIO-2e is not applicable to this project. If any special-status butterflies are identified from reconnaissance surveys, then MM BIO-2e will be implemented to protect the species and host plants from significant impacts.			
MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)	No	CAL FIRE N/A	CAL FIRE
No special-status beetles, flies, grasshoppers, or snails were found during SPR BIO-1 review. Thus, MM BIO-2f is not applicable to this project. If any special-status beetles, flies, grasshoppers, or snails are identified from reconnaissance surveys, then MM BIO-2f will be implemented to avoid and minimize impacts to these species.			
MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.	No	CAL FIRE N/A	CAL FIRE
SPR BIO-1 review returned one possible bumble bee species, the crotch bumble bee (Bombus crotchii). While the project is in the historic range of this species, it is outside of the current range. Thus, no special-status bumble bees are expected to be on project. Suitable habitat for bumble bee species is present on the project, in open fields where annuals and forbs bloom. This project is designed to target shrubs, low tree limbs and ladder fuels, not open fields. Therefore, treatment activities are not targeting suitable bumble bee habitat, habitat function will be maintained, and pile burning will not impact bumble bee species or habitat due to timing. Prescribed burning will happen before herbaceous understory blooming season or after they dehisced and seed out. Thus, avoiding the main flight season for any bumble bee species. With no special-status bumble bees present and suitable habitat function being maintained. The suitable habitat will benefit from treatment activities because clearing understory overgrowth allows new herbaceous flowers potential to grow, increasing suitable habitat area. MM BIO-2g is not applicable to this project, because the only exception to this mitigation approach is that this			

treatment benefits special-status bumble bees even though some non-listed special-status bumble bees may be taken during treatment in the occupied habitat. All treatment activities will be improving and protecting suitable habitat, therefore benefiting all bumble bees.			
MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)	No	CAL FIRE N/A	CAL FIRE
No prescribed herbivory is planned for this project; therefore, MM BIO-2h does not apply to this project.			
MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands. The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.	Yes	CAL FIRE Prior-During	CAL FIRE
No sensitive natural communities are present, but there are oak woodlands in the project. Treatment design will return vegetation composition and structure to their natural condition to maintain or improve habitat function of the oak woodland. The oak woodland habitat would benefit from the treatment in the occupied habitat area even though some limbs might be cut down during treatment activities. As well as dead, dying, diseased, or hazard trees being removed. After treatment, this oak woodland habitat will be better protected from catastrophic wildfire events, and overall habitat function will be maintained.			
MM BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands. If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects.	No	CAL FIRE N/A	CAL FIRE
Impacts to sensitive natural communities or oak woodlands will be avoided or reduced via MM BIO-3a; therefore, MM BIO-3b does not apply to this project.			
MM BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.	No	CAL FIRE N/A	CAL FIRE
There will be no loss of riparian habitats in the project area; therefore, MM BIO-3c does not apply to this project. Additionally, SPR HYD-4 identifies and protects Watercourse and Lake Protection Zones (WLPZ) around riparian habitats.			
MM BIO-4: Avoid State and Federally Protected Wetlands	No	CAL FIRE N/A	CAL FIRE
No wetland habitats are in the project area; therefore, MM BIO-4 does not apply to this project.			
MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites	No	CAL FIRE N/A	CAL FIRE
No nursery sites are in the project area; therefore, MM BIO-5 does not apply to this project.			

SPECIES STATUS SUMMARY TABLE
Results of Listed Species Found in the CNDDB Query

Wildlife

WILDLIFE		STATUS			Habitat	Potential Occurrence on Project	Reason	Avoidance Strategy
SCIENTIFIC NAME	COMMON NAME	Fed	State	CDFW				
Antrozous pallidus	Pallid Bat	N	N	SSC	Habitats include grasslands, shrublands, woodlands, and mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Roosts include caves, mines, rock crevices, live trees, snags, bat houses, and human structures.	Yes	Yes	SPR BIO-10. MM BIO-2b.
Corynorhinus townsendii	Townsend's Big-Eared Bat	N	N	SSC	Mesic habitats, pine forests, and arid desert scrub. Preferred roosting sites in large open dwellings, such as caves, mines, tunnels, buildings, or other human made structures. Roosting sites are a limiting resource for this species, which they are extremely sensitive to disturbance. Do NOT impact any potential roosting sites.	Yes	Yes	SPR BIO-10. MM BIO-2b.
Desmocerus californicus dimorphus	Valley Elderberry Longhorn Beetle	TH	N	.	Nearly always found on or close to its host plant, red or blue elderberry tree (Sambucus species), along rivers and streams.	No	Other	The critical habitat range for this species has decreased. It is not found outside of the Central Valley. References: 1) https://ucanr.edu/sites/Elderberry/Growing/VELB/ 2) https://www.fws.gov/species/valley-elderberry-longhorn-beetle-desmocerus-californicus-dimorphus
Empidonax traillii	Willow Flycatcher	N	E	.	Breeds/nests in shrubby woodland edges and brushy thickets, near standing water or along streams. In winter, they use shrubby clearings,	Yes	Yes	SPR BIO-10. SPR BIO-12. MM BIO-2a.

					pastures, and woodland edges often near water.			
Emys marmorata	Western Pond Turtle	N	N	SSC	Associated with permanent to nearly permanent water in a wide variety of habitat types. Such as ponds, lakes, streams, pools along intermittent streams, or irrigation ditches. Requires basking sites, and in colder areas they hibernate underwater in mud.	No	WLPZ	Associated with permanent to nearly permanent water in a wide variety of habitat types.
Euderma maculatum	Spotted Bat	N	N	SSC	Wide variety of foraging habitats but roosting sites are a limiting resource. Preferred roosting in rock cliff crevices with water in the area. Associated with cliffs and wet, montane meadows in the Sierra Nevada. Occasionally found in caves and buildings.	Yes	Yes	SPR BIO-10. MM BIO-2b.
Eumops perotis californicus	Western Mastiff Bat	N	N	SSC	Occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, palm oasis, chaparral, desert scrub, and urban environments. Roost in crevices in cliff faces, high buildings, trees, and tunnels. Need vertical faces to drop off and take flight. Nocturnal.	No	Elevation	0 to 1300 feet.
Haliaeetus leucocephalus	Bald Eagle	DL	E	FP	Bald Eagles have a wide variety of habitats but prefer nesting in the tallest tree canopy close to open water. Can be in any mature stand of conifers, deciduous, or hardwoods that are surrounded by smaller trees and nearby a food source (i.e., open water).	No	Habitat	No habitat.
Lasiurus blossevillii	Western Red Bat	N	N	SSC	Often on riparian trees for roosting and foraging, associated with mature stands of cottonwood, sycamore, and willows adjacent to streams. Found in the foliage of trees and shrubs, most commonly 1.5 to 12 m above the ground.	Yes	Yes	SPR BIO-10. MM BIO-2b.
Mylopharodon conocephalus	Hardhead	N	N	SSC	Freshwater demersal fish in relatively undisturbed habitats of large streams with high water quality. Inhabits deep, rock and sand bottomed pools of small to large rivers.	No	Habitat	No habitat.

Pekania pennanti pop. 2	Fisher - Southern Sierra Nevada Esu	E	TH	SSC	Mid to low elevations in Sierra's mixed conifer, ponderosa pine, red fir, and montane hardwood. Habitats with abundant physical structure, dense canopy cover, and large well-connected habitat patches. They generally avoid areas with little forest cover or significant human disturbance.	No	Habitat	No habitat.
Rana boylii	Foothill Yellow-Legged Frog	N	E	SSC	Found near rocky streams in a variety of habitats, such as valley-foothill hardwood, conifer, riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. Very water dependent, not found far from a permanent water source.	No	WLPZ	Very water dependent, not found far from a permanent water source.
Rana sierrae	Sierra Nevada Yellow-Legged Frog	E	TH	WL	Inhabits lakes, ponds, meadow streams, isolated pools, and sunny riverbanks in the Sierra Nevada Mountains. Usually active after snow melts.	No	Habitat	No habitat at project elevation.
Spea hammondii	Western Spadefoot	N	N	SSC	Primarily in grasslands with shallow temporary pools. Adults usually remain in underground burrows most of the year. Surface activity is nocturnal during rains or high humidity.	Yes	Yes	SPR BIO-10. MM BIO-2b.
Taxidea taxus	American Badger	N	N	SSC	Lives in open areas such as plains and prairies, farmland, wood edges, forests glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Dig burrows in dry, sandy, friable soils.	Yes	Yes	SPR BIO-10. MM BIO-2b.
Vulpes vulpes necator pop. 2	Sierra Nevada Red Fox - Sierra Nevada Dps	E	TH	.	Lives in a wide range of remote, high-elevation alpine and subalpine habitats. Including meadows, dense mature forest, talus, and fell fields. Habitat use varies seasonally.	No	Elevation	4000 to 12000 feet.

Species Status Identifiers Used on the Table

DL– Delisted **E** – Endangered **CE** – Candidate Endangered **CTH** – Candidate Threatened **TH**– Threatened
PTH – Potential Threatened **N** – None **NL** – Not Listed **R** – Rare **WL** – Watch List **SSC** – DFG Species of Special Concern

Plants

PLANTS		STATUS			Habitat	Potential Occurrence on Project	Reason	Avoidance Strategy
SCIENTIFIC NAME	COMMON NAME	Fed	State	CNPS				
Allium abramsii	Abrams' Onion	N	N	1B.2	Lower and upper montane coniferous forests, open, understory. Grows from one or more bulbs, attached to a thick rhizome.	No	Habitat	No coniferous forest habitat.
Allium yosemitense	Yosemite Onion	N	R	1B.3	Open, rocky slopes in chaparral, foothill woodland, yellow pine forest, and mixed evergreen forest.	Yes	Yes	SPR BIO-7. MM BIO-1a.
Balsamorhiza macrolepis	Big-Scale Balsamroot	N	N	1B.2	Habitats include chaparral, cismontane woodland, valley and foothill grasslands. Sometimes serpentinite soils.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Calyptridium pulchellum	Mariposa Pussypaws	TH	N	1B.1	Granitic soils, open, sandy or gravelly. On granite domes around ridgelines or ridgetops. Chaparral, cismontane or foothill woodlands. Flowers may not appear if there is a lack of rain.	Yes	Yes	SPR BIO-7. MM BIO-1a.
Cinna bolanderi	Bolander's Woodreed	N	N	1B.2	Streambanks, wet meadows, and moist sites in conifer forest.	No	Elevation	5479 to 8005 feet.
Clarkia australis	Small's Southern Clarkia	N	N	1B.2	It grows in foothill woodland or yellow pine forest of the central Sierra Nevada. Low water tolerance.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Clarkia biloba ssp. australis	Mariposa Clarkia	N	N	1B.2	Serpentinite soils, chaparral, cismontane or foothill woodland.	No	Soils	No serpentine soils.
Clarkia rostrata	Beaked Clarkia	N	N	1B.3	Valley, grassland, foothill, cismontane, oak, or pine woodland. Prefer north slopes, sunny to half-shady situations.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Collomia rawsoniana	Rawson's Flaming Trumpet	N	N	1B.2	Lower montane coniferous forests, meadows, seeps, riparian forests, yellow pine forest, shaded areas near streams in woodlands, mesic, usually in non-wetlands, but occasionally in wetlands. On stabilized alluvium in riparian zones.	Yes	Yes	SPR BIO-7. MM BIO-1b.

Cuscuta jepsonii	Jepson's Dodder	N	N	1B.2	Broad-leaved upland forest, upper to lower montane coniferous forest. Host species are Ceanothus diversifolius and Ceanothus prostratus.	No	Elevation	3937 to 7545 feet.
Delphinium recurvatum	Recurved Larkspur	N	N	1B.2	Chenopod scrub, cismontane woodland, valley and foothill grassland. Alkaline soils.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Diplacus pulchellus	Yellow-Lip Pansy Monkeyflower	N	N	1B.2	Lower montane coniferous forest. Wetlands, occasionally non-wetlands, wetland-riparian, meadows, yellow pine forest. Vernally wet depressions or seepage areas. Soils can be clay, volcanic, or granitic.	No	Habitat	No coniferous forest habitat.
Erigeron mariposanus	Mariposa Daisy	N	N	1A	Foothill and cismontane woodlands. Has only been found in a few locations in Mariposa County, however it is considered extinct by experts.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Eriophyllum congdonii	Congdon's Woolly Sunflower	N	R	1B.2	Chaparral, yellow pine forest, lower montane coniferous forest, valley and foothill grasslands, foothill and cismontane woodlands. Rocky, open, metamorphic soils.	Yes	Yes	SPR BIO-7. MM BIO-1a.
Erythranthe filicaulis	Slender-Stemmed Monkeyflower	N	N	1B.2	Occurs usually in wetlands, occasionally in non-wetlands. Mountain meadows, yellow pine forest, red fir forest, foothill woodland, wetland-riparian. Moist open areas on gentle slopes, disturbed soils, gravelly to loamy soils, generally in partial shade.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Erythranthe gracilipes	Slender-Stalked Monkeyflower	N	N	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Decomposed granitic, often in burned or disturbed areas.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Hulsea brevifolia	Short-Leaved Hulsea	N	N	1B.2	Upper and lower montane coniferous forest. Granitic or volcanic, gravelly or sandy.	No	Elevation	4921 to 10498 feet.
Leptosiphon serrulatus	Madera Leptosiphon	N	N	1B.2	Found in woodland openings throughout the Sierra Nevada foothills. Chaparral, yellow pine forests, cismontane woodland, and lower montane coniferous forests.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Lewisia congdonii	Congdon's Lewisia	N	R	1B.3	Chaparral, foothill woodland, conifer forest, red fir forest, and yellow pine forest.	Yes	Yes	SPR BIO-7. MM BIO-1a.

					Granite, metamorphic outcrops, crevices, or rockslides.			
Lomatium congdonii	Congdon's Lomatium	N	N	1B.2	Chaparral and foothill woodlands. Serpentine: strictly endemic, 95% of all occurrences on ultramafic.	No	Soils	No serpentine soils.
Lupinus citrinus var. citrinus	Orange Lupine	N	N	1B.2	Chaparral, foothill or cismontane woodland, open yellow pine forest, lower montane coniferous forest. Granitic soils.	Yes	Yes	SPR BIO-7. MM BIO-1b.
Lupinus citrinus var. deflexus	Mariposa Lupine	N	TH	1B.2	Occurs in Sierra Nevada foothills, woodland openings, and chaparral. Hillsides and ridgetops with decomposed granitic sandy soils.	Yes	Yes	SPR BIO-7. MM BIO-1a.
Plagiobothrys torreyi var. torreyi	Yosemite Popcornflower	N	N	1B.2	Meadows and seeps in yellow pine, red fir, lodgepole, subalpine, or lower montane coniferous forests.	No	Elevation	3937 to 6889 feet.

Species Status Identifiers Used on the Table

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PTH – Potential Threatened **N** – None **NL** – Not Listed **R** – Rare **WL** – Watch List **SSC** – DFG Species of Special Concern

EC-6: GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	Impact Geo-1, 3.7	LTS	SPR GEO-1, 2, 3, 4, 5, 6, 7, 8, SPR HYD-3 SPR AQ- 3 SPR HYD- 4	Yes	LTS	☒
Project treatment would result in vegetation removal and soil disturbance, which has the potential to increase rates of erosion and loss of topsoil that is exposed to wind and water erosion. Potential impacts related to soil erosion during implementation of the project treatments are within the scope of the of the activities and impacts addressed in the PEIR because the use of type of equipment, extent of vegetation removal, and intensity of prescribed burning proposed are consistent with those analyzed in the PEIR. Implementation of SPRs would avoid and minimize any substantial soil erosion or loss of topsoil during treatment activities, therefore this impact would be less than significant.						

Impact GEO-2: Increase Risk of Landslide	Impact Geo-2, 3.7	LTS	SPR GEO-3, 4, 7, 8, SPR AQ- 3	Yes	LTS	☒
Removal of vegetation during treatments activities implemented under the CalVTP could affect the root structure in treated areas such that the stability of slopes and soils could decrease, which would increase the risk of landslide. Potential impacts related to landslides during implementation of the project treatments are within the scope of the activities and impacts addressed in the PEIR because the extent of vegetation removal, intensity of prescribed burning, avoidance of steep slopes, and areas of instability are consistent with those analyzed in the PEIR. Implementation of SPRs would avoid or minimize the risk of landslide from project treatments, therefore this impact would be less than significant.						
Other Impacts to Geology, Soils, Paleontology, And Mineral Resources: Would the project result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Project treatment involves mechanical treatments. Thus, the project will suspend mechanical treatments if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours.			
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	CAL FIRE During	CAL FIRE
Project activities will limit heavy equipment that could cause soil disturbance or compaction from driving through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure.			

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	CAL FIRE During	CAL FIRE
With mechanical treatment being implemented on this project, project proponent will stabilize disturbed soils that result in exposure of bare soils over 50 percent or more in the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge.			
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	CAL FIRE During	CAL FIRE
The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. Additionally, after the first storm event where 1.5 inches of rain or more fell within a 24-hour period the project area will be inspected to determine if water breaks functioned properly. If any area is identified where erosion could result in substantial discharge the area will be immediately corrected and stabilized. The rainy period for this project area is November 1 through April 1.			
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	CAL FIRE During-Post	CAL FIRE
If control lines are constructed by hand or mechanical means for prescribed burning operations, water bars will be immediately installed if the control lines will not be used by vehicles and equipment. If control lines need to be utilized by vehicles or equipment during the prescribed fire period, then water breaks will be installed between October 15th to November 15th and April 1st to May 1st if the National Weather Service forecast is a chance (30% or more of rain) within the next 24-hour period. Water breaks shall be installed diagonally as a trench at least 6-inches into a firm ground base with a minimum of a 6-inch berm on the downhill side so that water can be intercepted and directed away from the exposed control line surface. The exit area for the water must be free of blockages allowing for free flow of water. Water breaks shall be installed mid slope of control lines on slopes greater than 50% at 75 feet, 26-50% at 100 feet, 11-25% at 150 feet, and 10% or less at 200 feet.			
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	CAL FIRE Prior-During	CAL FIRE
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. No piles will occur within WLPZs or established ELZs.			
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	CAL FIRE Prior-During	CAL FIRE

Heavy equipment will stay on slopes less than 50%. When slopes are greater than 50%, project proponent will evaluate treatment area for erosion hazards before heavy equipment treatments proceed. If the erosion hazard on slopes above 50% is too high or when slopes exceed 65%, heavy equipment will not be allowed. Situational awareness is advised for mechanical operators to get approval on slopes over 50%, not operate on slopes over 65%, stay on pre-existing roads as much as possible, and always operate safely.			
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types.	Yes	CAL FIRE Prior	CAL FIRE
The Project Proponent will have a Registered Professional Forester or licensed geologist to evaluate treatment areas with slopes greater than 50% for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard).			

EC-7: GREENHOUSE GAS EMISSIONS

	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GHG-1: Conflict with applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs	Impact GHG-1, 3.8	LTS	SPR GHG- 1	Yes	LTS	☒
Use of vehicles and mechanical equipment and prescribed burning during treatments would result in GHG emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact GHG-2: Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, 3.8	PSU	SPR AQ- 3 MM GHG- 2	Yes	LTSM	☒
Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments would result in GHG emissions. The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR. In addition, project specific emissions were calculated. Generation of GHG emissions from the project treatments are within the scope of the PEIR analysis and site-specific analysis.						
Other Impacts to related to Greenhouse Gases: Would the project result in other impacts related to greenhouse gases that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE
GHG emissions calculations were based on estimates of total fossil fuel consumption by motorized equipment required for facilitation of this project. Estimates were based on high end usage projections. Conversion factors utilized were obtained from the California Climate Action Register (CCAR) General Reporting Protocol (CCAR 2009). While the FOFEM emissions calculations estimate the emissions for burning fuel types. *This project's total treatment area of 986 acres is estimated to produce 6,141 Metric Tons (MT) of CO2 from smoke or decay emissions via prescribed burning. This is the maximum predicted MT CO2 emissions IF the entire project is burned in one year. This maximum predicted MT CO2 may occur in the first or second year of this project's approval, but for the rest of this project's 10 year lifespan it will not emit that much CO2 in any given year based on project timing implementation.* *This project is divided into three different treatment zones. Treatment Zone 1 is anticipated for bi-annual burns, Treatment Zone 2 is anticipated to burn once or twice, and Treatment Zone 3 is anticipated to pile burn once then mainly mechanical and manual to maintain. Treatment Zone 1 with 308 acres estimated to produce 1,918 MT CO2. Treatment Zone 2 with 601 acres estimated to produce 3,743 MT CO2. Treatment Zone 3 with 77 acres estimated to produce 479 MT CO2. They plan to implement Treatment Zone 2 first in Fall. Then Treatment Zone 1 second in Spring. Lastly Treatment Zone 3 will be done as needed. Therefore the maximum anticipated MT CO2 emissions would be when Treatment Zone 2 burns and if Treatment Zone 3 is also implemented, resulting with 4,222 MT CO2 as the maximum for one year in this project's 10 year lifespan. All other years will be significantly less than this, likely less than 2,397 MT CO2 if Treatment Zone 1 and 3 are burned in the same year.* *Years required for complete sequestration for this project is predicted to be 2 to 3 years. Estimated equipment emissions is 0.77 MT CO2 per day, this is if all proposed equipment were used on the same day. Daily equipment emissions are likely to be less than the estimate based on crew and equipment availability on any given day. See calculations in attached GHG and FOFEM reports.*			
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	CAL FIRE Prior	CAL FIRE

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.

EC-8: Energy

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	Impact ENG-1, 3.9	LTS	N/A	Yes	LTS	☒
Use of vehicles and mechanical equipment during treatment would result in consumption of energy. Use of fossil fuels for equipment and vehicles was examined in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Other Impacts to Energy Resources: Would the project result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

EC-9: HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, 3.10	LTS	SPR HAZ- 1	Yes	LTS	☒
Treatment activities would require the use of fuels and related accelerants, which are hazardous materials. CAL FIRE has an extensive maintenance program assuring equipment used for CAL FIRE projects are in good working order, free of leaks. Fueling of equipment will occur primarily at local CAL FIRE stations. If fueling is needed on larger equipment or firing devices, they will be filled on level ground. The impact is within the scope of the PEIR analysis and site-specific analysis.						

Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, 3.10	LTS	SPR HAZ-5, 6, 7, 8, 9	No	N/A	☒
This impact does not apply because herbicides are not a proposed treatment method for this project.						
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, 3.10	PS	MM HAZ- 3	No	N/A	☒
This impact does not apply to the treatment project because there are no known hazardous material sites in the project area.						
Other Impacts to Hazardous Materials, Public Health and Safety: Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
Diesel and gasoline powered equipment used for implementation of this project will be filled or pre-mixed off site, typically at the local CAL FIRE Station and brought to the site. All equipment will be inspected for leaks, any equipment found leaking will be promptly removed from project site and repaired as needed. Filling of equipment will not occur near any watercourses or protection zones to watercourses.			
SPR HAZ-2 Require Spark Arrestors: This SPR applies only to manual treatment activities and all treatment types	Yes	CAL FIRE Prior-During	CAL FIRE
CAL FIRE policy requires that no chainsaw shall be used that is not equipped with a spark arrester. CAL FIRE chainsaw training course requires and trains employee's in identifying and maintaining spark arrestors. Chainsaw operation without a spark arrestor is prohibited and the chainsaw is out of service until a spark arrester is installed.			
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
With manual treatment activities involving chainsaws on this project, fire extinguishers are required as per SPR HAZ-3.			

SPR HAZ-4 Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
Smoking is prohibited in vegetated areas.			
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. This SPR applies only to herbicide treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
This SPR does not apply because herbicides are not a proposed treatment method for this project.			
SPR HAZ-6 Comply with Herbicide Application Regulations. This SPR applies only to herbicide treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
This SPR does not apply because herbicides are not a proposed treatment method for this project.			
SPR HAZ-7 Triple Rinse Herbicide Containers. This SPR applies only to herbicide treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
This SPR does not apply because herbicides are not a proposed treatment method for this project.			
SPR HAZ-8 Minimize Herbicide Drift to Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
This SPR does not apply because herbicides are not a proposed treatment method for this project.			
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
This SPR does not apply because herbicides are not a proposed treatment method for this project.			

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	CAL FIRE Prior	CAL FIRE
Project proponent contacted landowner and conducted a DTSC EnviroStor website search, and no known contamination sites were present on the project site.			

EC-10: HYDROLOGY AND WATER QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	Impact HYD-1, 3.11	LTS	SPR HYD- 4 SPR AQ- 3 SPR BIO- 4, 5 SPR GEO-4, 6 MM BIO- 3b	Yes	LTS	☒
High intensity fires can result in severe burns where soils become water repellent and increased runoff carries ash, sediment, and debris into downstream watercourses. However, the prescribed burning that would be implemented under the CalVTP would include fire behavior modeling (for broadcast burns) and burning would be conducted when fuel moisture and environmental conditions allow for effective fuel reduction while reducing the risk of high severity burns. The patchwork of the fuels remaining after prescribed burning and the existing buffer between the project site and watercourses will capture any potential sediment or runoff created. No fire ignition will occur within WLPZs, however low intensity backing fires is allowed to enter or spread into WLPZs. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	Impact HYD-2, 3.11	LTS	SPR HYD- 1, 4, 5 SPR BIO- 1 SPR GEO- 1, 2, 3, 4, 7, 8 SPR HAZ- 1, 5	Yes	LTS	☒
Project design has minimized the risk of substantial degradation to surface or groundwater quality from manual or mechanical treatment activities by implementing relevant SPRs. Therefore, the risk of substantial degradation to surface or groundwater quality from manual and mechanical treatments would be avoided and minimized. This impact would be less than significant and within the scope of the PEIR.						
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	Impact HYD-3, 3.11	LTS	SPR HYD- 3	No	N/A	☒
This impact does not apply because prescribed herbivory is not proposed as a treatment activity on the project site.						

Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides	Impact HYD-4, 3.11	LTS	SPR HYD- 5 SPR BIO- 4 SPR HAZ- 5, 7	No	N/A	☒
This impact does not apply because herbicides are not a proposed treatment method for this project.						
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	Impact HYD-5, 3.11	LTS	SPR HYD- 4, 6 SPR GEO- 5	Yes	LTS	☒
Relevant SPRs would avoid substantial alterations to existing drainage patterns on the project area. This impact would be less than significant and within the scope of the PEIR.						
Other Impacts to Hydrology and Water Quality: Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Central Valley Regional Water Quality (Region 5) general waste discharge requirements (GWDR) and waste discharge requirement waiver procedures will be followed. Regional Water Quality Control Board has been consulted.			
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	CAL FIRE During	CAL FIRE
CAL FIRE will avoid construction of new roads, including temporary roads. No new road will be constructed or reconstructed.			
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: This SPR applies to prescribed herbivory treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
No prescribed herbivory is planned for this project; therefore SPR HYD-3 is not applicable.			

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	CAL FIRE Prior-During	CAL FIRE
Crooks Creek intersects the project area, it is a Class II watercourse, so a 50-feet WLPZ buffer will be placed around it. WLPZ protections will be applied for all treatments, as per SPR HYD-4 in the CALVTP PEIR.			
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: This SPR applies to herbicide treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
No herbicide treatment is planned for this project; therefore SPR HYD-5 is not applicable.			
SPR HYD-6 Protect Existing Drainage Systems: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During-Post	CAL FIRE
Treatments and preparatory work for prescribed fire treatments could potentially alter existing drainage patterns, however, it is anticipated that drainage patterns will not be affected. If any drainage structures are damaged during operations, they shall be repaired prior to October 15th of the year the damage occurred. No new roads will be constructed. The impact is within the scope of the PEIR analysis and site-specific analysis.			

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	Impact LU-1, 3.12	LTS	SPR AD-3, 9	Yes	LTS	☒
The environmental impacts of the proposed CalVTP are evaluated throughout this PEIR; SPRs and mitigation measures are identified to avoid or reduce impacts and ensure consistency with local land use plans, policies, or regulations pertinent to resources considered in this PEIR and adopted for the purpose of avoiding or mitigating effects to these resources. Local county land use planning and regulation will be adhered to; treatment activities are consistent with local polices and regulations. The private landowner's objectives are reducing hazardous fuel accumulations since fire exclusion, increase the forest resiliency to fire, protect the property, and improve wildlife values in the area. For these reasons, implementation of the proposed CalVTP would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation. This impact would be less than significant and within the scope of the PEIR analysis and site-specific analysis.						
Impact LU-2: Induce Substantial Unplanned Population Growth	Impact LU-2,	LTS	N/A	Yes	LTS	☒

	3.12					
Treatments will occur on a day-to-day operational period and local resources and personnel will be utilized from the local CAL FIRE Unit. Short-term increase in personnel will be experienced during the implementation of the project however every evening these resources will leave. Implementation of the proposed CalVTP would not induce substantial unplanned population increases in any one area to cause a need for new housing and other infrastructure. This impact would be less than significant, within the scope of the PEIR analysis, and site-specific analysis.						
Other Impacts related to Land Use and Planning, Population and Housing: Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?				No	N/A	☒

EC-12: NOISE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	Impact NOI-1, 3.13	LTS	SPR NOI- 1, 2, 3, 4, 5, 6 SPR AD- 3	Yes	LTS	☒
Treatments would require heavy, noise-generating equipment. Treatment activities would occur during daytime hours, which avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. The potential for a substantial short-term increase in ambient noise levels was examined in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	Impact NOI-2, 3.13	LTS	SPR NOI- 1	Yes	LTS	☒

Treatments would involve large trucks hauling heavy equipment and crews to the project site. These haul truck trips would pass by residential receptors along a busy State highway and the event of each truck passing by could increase the single event noise levels (SENL). Haul trips associated with the treatment would occur during daytime hours, which avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. It is common for heavy equipment to travel in the area. Short-term increase in project equipment will be consistent with current equipment use in the area. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Other Impacts Related to Noise: Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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	CAL FIRE During	CAL FIRE
Per SPR NOI-1 noise-generating vegetation treatment activities will be limited: Monday – Saturday between 7:00 am to 6:00 pm. Sunday and federal holidays 9:00 am to 6:00 pm. Most activity is anticipated to occur between 9:00 am - 3:00 pm.			
SPR NOI-2 Equipment Maintenance: All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
As per SPR NOI-2, all equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.			
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
As per SPR NOI-3, the project proponent will require that engine shrouds be closed during equipment operation.			
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
As per SPR NOI-4, staging areas will be away from noise-sensitive land uses.			

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	CAL FIRE During	CAL FIRE
As per SPR NOI-5, all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes.			
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. This SPR applies only to mechanical treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE
Project location is not near noise-sensitive receptors such as schools, places of worship or hospitals but is adjacent to (within 1,500 feet of) residential land uses. A neighborhood notification of Operations shall be posted on the ownership visible to the public, at least five (5) days prior to the date of commencement of operations. There is no public access to this project, gates are locked by private landowners.			

EC-13: RECREATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	Impact REC-1, 3.14	LTS	SPR REC- 1	No	N/A	☒
The proposed project is not within a public recreation area. No recreational users or recreation areas would be affected by the treatment. This impact does not apply.						
Other Impacts to Recreation: Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity

SPR REC-1 Notify Recreational Users of Temporary Closures. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure approximately 2 weeks prior to the commencement of the treatment activities. This SPR applies to all treatment activities and treatment types.	No	CAL FIRE N/A	CAL FIRE
No recreational users or recreation areas would be affected by the treatment. This impact does not apply.			

EC-14: TRANSPORTATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact TRAN-1: Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures	Impact TRAN-1, 3.15	LTS	SPR TRAN- 1 SPR AD- 3	Yes	LTS	☒
Treatments will temporarily increase vehicular traffic. The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR. The proposed treatment project would be short-term, and temporary increases in traffic related to treatments are within the scope of the activities and impacts addressed in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, 3.15	LTS	SPR TRAN- 1 SPR AD-3	Yes	LTS	☒
Treatments would not require the construction or alteration of any roadways. However, smoke generated during burning operations potentially could affect visibility along roadways for short periods of time. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact TRAN-3: Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, 3.15	PSU	MM AQ- 1	Yes	PSU	☒
Treatments could temporarily increase vehicle miles travelled (VMT) for a short period as equipment enters the project location. It is not likely that traffic will increase what is normal for the local area. This impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP could result in a net increase in VMT. The impact is within the scope of the PEIR analysis and site-specific analysis.						

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

	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	CAL FIRE Prior-During	CAL FIRE
Traffic will not be increased beyond what is normal for the local area. With good visibility and dirt roads, 15 mph speed limit is recommended to keep dust to a minimum. Pull offs are available to let traffic get through. During prescribed burning operations, signs will be placed along the roadway to advise of smoke conditions.			

EC-15: PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	Impact UTL-1, 3.16	LTS	N/A	Yes	LTS	☒
During prescribed fire operations, fire equipment will come equipped with water prior to entering the project location. Burn operations are low intensity and use of water is limited to allow the burn to consume fuels. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	SU	SPR UTIL- 1	No	N/A	☒
Biomass generated by mechanical and manual treatments would be lopped, scattered, or pushed into piles for a prescribed burn. This impact was identified as potentially significant and unavoidable in the PEIR because biomass hauled offsite could exceed the capacity of existing infrastructure for handling biomass. For the proposed treatment project, no biomass would be hauled off-site; therefore, there is no potential to exceed the capacity of existing infrastructure. The impact is within the scope of the PEIR analysis and site-specific analysis.						

Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	Impact UTL-3, 3.16	LTS	SPR UTIL- 1	Yes	LTS	☒
Vegetation treatments would generate biomass within the project location. Biomass generated from the proposed treatment will be treated on-site. Compliance with federal, state, and local management and reduction goals, statutes, and regulations related to solid waste was examined in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Other Impacts to Public Services, Utilities, and Service Systems: Would the project result in other impacts to public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. This SPR applies only to mechanical and manual treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
No disposal of material outside of the treatment area needed. Therefore, SPR UTIL-1 is not applicable.			

EC-16: WILDFIRE

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

Increase in exposure to wildfire during implementation of the treatment project was examined in the PEIR. Increased wildfire risk associated with prescribed burning and use of heavy equipment in vegetated areas are within the scope of the of the activities and impacts addressed in the PEIR. The impact is within the scope of the PEIR analysis and site-specific analysis.						
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	Impact WIL-2, 3-17	LTS	SPR AQ- 3 SPR GEO- 3, 4, 5, 8	Yes	LTS	☒
Potential for post-fire landslides was examined in the PEIR and it does not include new housing nor result in substantial unplanned population growth. Therefore, it would not place people or structures in an area with risks related to post-wildfire flooding or landslides. Low intensity prescribed fire and pile burning will reduce the potential and concern for high severity or uncontrolled fires which may expose ground surface soils to erosion potential, result in soil hydrophobicity, or increased landslide potential. The impact is within the scope of the PEIR analysis and site-specific analysis. With the implementation of SPRs, people and structures would not be exposed to substantial risks from post-fire landslides or flooding, and the impact would be less than significant.						
Other Impacts related to Wildfire: Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?				No	N/A	☒

EC-17: ADMINISTRATIVE STANDARD PROJECT REQUIREMENTS

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity

SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE would meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
CAL FIRE will meet with the project proponent to discuss protected resources and their protection measures. Prior to prescribed burning, CAL FIRE will also discuss the burn plan and IAP.			
SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Prior to project implementation, project boundaries and protected resources will be mapped, flagged, and defined. Making sure project activities avoid protected resources and stay within the project boundaries.			
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent would design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Unit Fire Plan objective: Facilitate fuel reduction projects that will aid both the public and emergency.			
SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent would: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Prescribed fire signs will be placed within the project area 3 days prior to firing activities. Notifications will be distributed through regular social media outlets by the Unit PIO. County Supervisors will be notified as required in SPR AD-4.			

SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE During-Post	CAL FIRE
Trash receptacles will not be needed on-site. CAL FIRE staff has been trained and will be advised to remove all trash generated daily. Flagging will be removed once the project has been completed and is no longer needed to protect the resources.			
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent would post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	Yes	CAL FIRE Prior-During	CAL FIRE
Treatment activities signs will be placed within the project area one to three days prior to activities. Signs will have contact details of project proponents to address any questions or concerns.			
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism. This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior-During-Post	CAL FIRE
This proposed VTP project was reported to the Board and will be tracked on CalMAPPER.			
SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE would include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period would be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE
CAL FIRE will have access to this public land for three years after project implementation to assess treatment effectiveness.			

SPR AD-9. Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent would contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. This SPR applies to all treatment activities and all treatment types.	No	CAL FIRE N/A	CAL FIRE
No coastal zone in or nearby project. Thus, SPR AD-9 is not applicable.			

EC-18: MANDATORY FINDINGS OF SIGNIFICANCE

	New Impact that is Significant or Potentially Significant	New Impact that is Less Than Significant with Mitigation Incorporated	New Impact that is Less Than Significant 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 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?	☐	☐	☐	☒

Discussion

No additional comments.

Additional information:

- ☒ List of Standard Project Requirements (SPRs) and Mitigations Measures (MMs)
- ☒ Vicinity map on a USGS quad map
  - ☒ Aerial imagery of subsequent activity area
  - ☐ Subsequent activity location on Treatable Landscape & Ecoregions Map
  - ☒ Parcel map with APN's covering all ownerships within subsequent activity area
  - ☒ Soil survey map of subsequent activity area
- ☒ Smoke Management Plan/Burn Plan
  - ☐ Public Notice for Prescribed Burning
  - ☒ Model run of FOFEM, BEHAVE, or other appropriate fire behavior modeling simulation
  - ☐ Burn Unit Maps – Ortho and Topographic
- ☐ Air District Asbestos Dust Control Plan
- ☐ Incident Action Plan (IAP)
- ☒ Archaeological reviews/surveys
- ☒ Biological review/surveys
  - ☒ CNDDB Records Search
  - ☒ Biologist Consultation/Notification
  - ☒ Water Quality consultation
  - ☒ Consult Attachment C
- ☐ Biological Compensation Plan
- ☒ Geological Review
- ☐ Spill Prevention & Response Plan
- ☐ Traffic Management Plan
- ☐ Organic Waste Disposal Plan
- ☒ Air Quality and GHG Emissions Estimates
  - ☐ Air Quality consultations
- ☐ Off-Site Noise-Sensitive Receptors Notification
- ☐ Other _____

DELIVERABLES POST APPROVAL

- ☒ Public Notification (News/Press Release)
- ☒ Authorized PFIRS Ignition Request
- ☒ Live Fire Notification
- ☒ Approved FC 400
- ☒ Public Notifications to neighbors

- ☒ Weather Forecasts/Spot weather Forecasts
- ☒ Go NO Go Checklist
- ☒ Incident Action Plans (IAP's, Prescribed burn activities)
- ☒ Completion Reports to Region
- ☒ Other: FC 33, Project Photos

Crooks Mtn Ranch VTP

Attachment A – Standard Project Requirements (SPR) & Mitigation Measures (MM)

EC-1: Aesthetic and Visual Resource Standard Project Requirements

- **SPR AES-1 Vegetation Thinning and Edge Feathering:** The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.
- **SPR AES-2 Avoid Staging within Viewsheds**: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR AES-3 Provide Vegetation Screening**: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- **MM AES-3 Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks**: N/A

EC-2: Agriculture and Forest Resources

- **NONE**

EC-3: Air Quality Standard Project Requirements

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

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

  This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AQ-5 Avoid Naturally Occurring Asbestos: 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.
- MM AQ-1 Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques:

  Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction

techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible.

Techniques for reducing emissions may include, but are not limited to, the following:

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

EC-4: Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements

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

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

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

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

  In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR CUL-3 Pre-field Research:** The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR CUL-4 Archaeological Surveys:** The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR CUL-5 Treatment of Archaeological Resources:** If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These

protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- MM CUL-2 Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources: If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.

EC-5: Biological Resources Standard Project Requirements

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

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

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

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

- **SPR BIO-1 Review and Survey Project-Specific Biological Resources:** The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA for each treatment project, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also

record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the Biological Resources Discussion in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:

1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided**. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:
    a. by physically avoiding the suitable habitat, or
    b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).

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

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

- **SPR BIO-2 Require Biological Resource Training for Workers:** The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

Sensitive Natural Communities and Other Sensitive Habitats

- **SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats**. N/A
- **SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function**. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:

- Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.
- Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.
- Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see *Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service*).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.
- Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.
- The project proponent will notify CDFW pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.
- In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of

achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.

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

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

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

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

  - Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.
  - The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.

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

  Additional measures will be applied to ecological restoration treatment types:

  - For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.

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

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

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

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

- follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016).

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

Special-Status Plants

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

  Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status.

  If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.

  For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:

  - If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.
  - If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.

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

Environmentally Sensitive Habitat Areas

- **SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs.** N/A

Invasive Plants and Wildlife

- **SPR BIO-9 Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife:** The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):

  - clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;

- for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
- inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;
- stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
- identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;
- treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and
- implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version).

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

Wildlife

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

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

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

- **SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory).** 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 native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist.

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

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

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

  Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the

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

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

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

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

- MM BIO-1a Avoid Loss of Special-Status Plants Listed under ESA or CESA: If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.

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

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

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

  - Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.
  - Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank.
  - Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.
  - No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.

  A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant

species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.

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

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

  Avoid Mortality, Injury, or Disturbance of Individuals

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

  1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR

  2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species.

  - For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c.
  - Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.

  Maintain Habitat Function

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

  - While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding,

foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.

- If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.

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

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

  Avoid Mortality, Injury, or Disturbance of Individuals

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

  For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

- No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician may will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment if the treatment activity has the potential to result in mortality, injury, or disturbance. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.
- For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.

Maintain Habitat Function

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

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

A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially

reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.

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

- **MM BIO-2c Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities):** N/A
- **MM BIO-2d Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities):** N/A
- **MM BIO-2e Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities):** N/A
- **MM BIO-2f Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities):** 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):** N/A
- **MM BIO-2h Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory):** N/A
- **MM BIO-3a Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands:** The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:
    - Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.
    - Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in *Fire in California's Ecosystems*

(Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.

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

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

- A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.

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

- **MM BIO-3b Compensate for Loss of Sensitive Natural Communities and Oak Woodlands:** N/A
- **MM BIO-3c Compensate for Unavoidable Loss of Riparian Habitat:** N/A
- **MM BIO-4 Avoid State and Federally Protected Wetlands:** N/A
- **MM BIO-5 Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites:** N/A

EC-6: Geology, Soils, and Mineral Resource Standard Project Requirements

- **SPR GEO-1 Suspend Disturbance during Heavy Precipitation:** The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.
- **SPR GEO-2 Limit High Ground Pressure Vehicles:** The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.
- **SPR GEO-3 Stabilize Disturbed Soil Areas:** The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil

surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.

- **SPR GEO-4 Erosion Monitoring:** The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.
- **SPR GEO-5 Drain Stormwater via Water Breaks:** The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.
- **SPR GEO-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.
- **SPR GEO-7 Minimize Erosion:** To minimize erosion, the project proponent will:

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

  (i) Slopes steeper than 65 percent.

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

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

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

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

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

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

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

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

EC-7: Greenhouse Gas Emissions Standard Project Requirements

- **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.
- **MM GHG-2 Implement GHG Emission Reduction Techniques During Prescribed Burns**: When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the *National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire* (NWCG 2018):
  - reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;
  - reduce the total area burned through mosaic burning;
  - burn when fuels have a higher fuel moisture content;
  - reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and
  - schedule burns before new fuels appear.

  As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.

  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.

EC-8: Energy

- **NONE**

EC-9: Hazardous Material and Public Health and Safety Standard Project Requirements

- **SPR HAZ-1 Maintain All Equipment:** The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR HAZ-2 Require Spark Arrestors**: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- **SPR HAZ-3 Require Fire Extinguishers:** The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- **SPR HAZ-4 Prohibit Smoking in Vegetated Areas:** The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR HAZ-5 Spill Prevention and Response Plan:** N/A
- **SPR HAZ-6 Comply with Herbicide Application Regulations:** N/A
- **SPR HAZ-7 Triple Rinse Herbicide Containers:** N/A
- **SPR HAZ-8 Minimize Herbicide Drift to Public Areas:** N/A
- **SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas:** N/A
- **MM HAZ-3 Identify and Avoid Known Hazardous Waste Sites:** Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.

EC-10: Hydrology and Water Quality Standard Project Requirements

- **SPR HYD-1 Comply with Water Quality Regulations:** Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge

Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- **SPR HYD-2 Avoid Construction of New Roads:** The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR HYD-3 Water Quality Protections for Prescribed Herbivory:** N/A
- **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

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 the protection zone				
< 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).

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

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

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

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

- **SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:** N/A
- **SPR HYD-6 Protect Existing Drainage Systems:** If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and ensure that restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

EC-11: Land Use and Planning, Population and Housing

- NONE

EC-12: Noise Standard Project Requirements

- **SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:** The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR NOI-2 Equipment Maintenance:** The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.
- **SPR NOI-3 Engine Shroud Closure:** The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.
- **SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses:** The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR NOI-5 Restrict Equipment Idle Time:** The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- **SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:** For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

EC-13: Recreation Standard Project Requirements

- **SPR REC-1 Notify Recreational Users of Temporary Closures.** N/A

EC-14: Transportation Standard Project Requirements

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

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

EC-15: Public Services and Utilities Standard Project Requirements

- **SPR UTIL-1: Solid Organic Waste Disposition Plan**. N/A

EC-16: Wildfire

- **NONE**

EC-17: Administrative Standard Project Requirements

- **SPR AD-1 Project Proponent Coordination:** For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- **SPR AD-2 Delineate Protected Resources:** The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging

or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- SPR AD-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 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.
- SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.
- SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism.

  Information on proposed projects (PSA in progress):

  - GIS data that include project location (as a point);
  - project size (typically acres);

- treatment types and activities; and
- contact information for a representative of the project proponent.

Information on approved projects (PSA complete):

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

Information on completed projects:

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

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

- **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.
- **SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required**. N/A