THE CALIFORNIA VEGETATION TREATMENT PROGRAM ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1.	**Project Title:**	*Shamrock-Eriksen*
2.	**CAL FIRE Project Number**	*RX-North-104-MEU*
3.	**CalVTP I.D. Number**	*2021-5*
4.	**Project Proponent Name and Address:**	*CAL FIRE MEU* *17501 North Highway 101* *Willits, CA 95490*
5.	**Contact Person Information and Phone Number:**	*Julie Rhoads* *MEU – VMP Forester* *julie.rhoads@fire.ca.gov* *(707) 671-3357*
6.	**Project Location:**	• *Mendocino County* • *Sections 1-4 and 6; T20N; R14W;* *Sections 14-16,19-23 and 25-36; T21N; R14W; MDB&M* • *The project is located on 18,233 acres of private land located southeast of the community of Laytonville. The project is bounded by State Highway 101 and Long Valley on the west, Bear Pen Canyon and the Laytonville-Dos Rios Road on the north, the Eel River on the east, and the northeast-trending ridge north of Cherry Creek on the south.* • *The project area is approximately 3.5 miles southeast of Laytonville, 11 miles southwest of Covelo, 15 miles southeast of Leggett, and 18-20 miles north of Willits, CA.* • *See the Location Map for additional location information.*
7.	**Total Area to be Treated (acres)**	*18,233 acres of which 6,828 acres are currently scheduled. Additional units within the ownership may be included over the life of this project.*

8. **Description of Project:** (Describe the whole action involved, including any phasing of initial treatments as well as planned treatments, including equipment to be used and planned duration of treatments, but not limited to later phases (e.g., maintenance) of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

This CalVTP project will be completed as part of a 10-year plan using prescribed fire as restoration treatment for grasslands, chaparral, and understory vegetation within oak woodlands and mixed conifer habitats creating a mosaic of variously burned vegetation and islands of unburned habitat. Treatment areas are currently stratified across 7 separate units. Fire will be used under a narrow range of climatic conditions to ensure control and follow a seasonal burn window to maximize beneficial effects on the plant and wildlife communities. Approximately +/- 500 to 700 acres will be burned each year. The 10-year timeframe ensures that all the burn units identified will have a high likelihood of treatment and provides the needed flexibility for dealing with scheduling uncertainties related to annual variation in the fire season and the availability of unit resources.

The project area is within two ownerships – 94.6% of the project is on the Shamrock Ranch and 5.4% on Eriksen's "Miller" Ranch. The project area consists primarily of Montane Hardwood, Montane Hardwood-Conifer, grazed and un-grazed Annual Grassland, Mixed Chaparral, and Chamise-Redshank Chaparral. Areas of oak woodland are present between chapparal stands. A mosaic burn pattern in the chaparral fuel type is planned with a fuel consumption rate of

approximately 60-70%. Ignitions in burn units will include both interior and perimeter ignitions. With multiple ignition sources, fire will spread at different rates and intensities and will result in mosaic burns. Where applicable, perimeter ignitions at ridgetops will be allowed to burn until spread is no longer carried by fuels and ground moisture conditions no longer support fire. This will result in ridgetop fuel breaks. The terrain consists of slopes that range from broad valleys with moderate to steep side slopes and gently sloping ridgelines.

The project area was previously part of a CAL FIRE Vegetation Management Plan, RX-NORTH-090-MEU. In 2020, 305 acres were burned in a treatment area of 358 acres (CAL FIRE 2023). Historically, chaparral experienced fire every 15 to 20 years in this region. Fires in the past were a result of natural processes such as lightning strikes, or during the past 12,000 to 15,000 years, were set intentionally by Native Americans who discovered that fire killed certain woody plants and encouraged fruit-bearing shrubs and forage-producing grasslands. The project area is rich in Native American cultural resources, as well as historical resources, and burn prescriptions were developed in consultation with a qualified professional archeologist. Activities near historical and archaeological resources will adhere to site-specific protection measures enumerated in the Management Recommendations within the confidential Archaeological Survey Report.

The project area is located within the Northern California Coast Ranges Ecological Section(M261B), and ranges in elevation from 1,140 to 3,500 feet. The vegetation types targeted for treatment in this plan, as classified in the CWHR habitat classification scheme, include annual grassland, mixed chaparral, chamise-redshank chaparral, and understory vegetation in montane hardwood and montane hardwood-conifer. Hardwood-pine overstory is not targeted for burning. Many of the dominant plant species in these habitat types have evolved adaptations for surviving and thriving after fire. Treatment units contain a mixture of grassland and chaparral, integrated with patches of woodland vegetation types. Prescribed burning will enhance native plant species that have evolved with fire, while simultaneously reducing non-native invasive plants where possible. The frequency and intensity of burning is designed to avoid type-conversion of native vegetation.

The geology in the project area is underlain by the Franciscan terrain that dominates most of California's North Coast. This type of geology is naturally unstable and sensitive to human disturbance. The Shamrock Ranch did not participate in the USDA Soil Conservation Service's Mendocino County Eastern Part Soil Survey of 1991. Thus, soil types of the project area on the Miller-Eriksen Ranch and similar soil types corresponding to the similar vegetation types in the surrounding area were evaluated for erosion hazard, land suitability, permeability, and runoff rate. The CAL FIRE GIS Erosion Hazard Rating Tool was used to calculate surface soil erosion hazard ratings. Also reviewed were the historic maps of Geomorphic Features Related to Land Sliding for the Laytonville and Longvale quadrangles that covered almost all of the Shamrock Ranch. These are produced by the CA Dept. of Conservation and depicted areas of debris slide, disrupted ground, earthflows, and slides. Prescribed fire will have little effect on soil characteristics as long as burning is conducted within the prescription. As watercourses of all classes are present in the treatment units, per SPR HYD-4, Watercourse and Lake Protection Zones and corresponding protection measures will be established based on watercourse classifications and slopes.

Control lines will be preplanned and will be established utilizing an existing road network as much as feasible. A bulldozer may be employed to construct new control lines or re-scrape overgrown roads and skid trails down to mineral soil to ensure functionality prior to ignition. Handlines will be constructed in areas inaccessible to heavy equipment or where such use is necessary to avoid impacts to pre-identified sensitive resources (e.g., biological, cultural, geological, or other). Mechanical vegetation removal and pile burning may be necessary to avoid prescribed fire impacts to resources identified for retention, especially where fuel loading is high. Hazard tree and fuel reduction along roadsides may be done with hand crews or mechanically prior to burning.

CAL FIRE will administer the burns. An Incident Commander (IC) will be identified by the Unit Chief to supervise the entire burn operation. The perimeters and interiors of burn units will be fired utilizing a combination of terra-torch (mobile) and drip-torch (on-foot). Specific environmental parameters must be met prior to the initiation of burning and must be maintained within predefined limits (i.e. burn specifications) for burning to continue. Hourly weather reports will be conducted during the burn or as necessary if conditions change to ensure operations are within specifications

otherwise the burn may be extinguished for safety reasons. Ignitions shall occur in areas based on conditions being within prescription such as wind, fuel moisture, topography, the existence of control lines, and placement of holding resources. Backing and flanking fire will be utilized within units to ensure sufficient burned area is created for controlling a more intense head fire that may be needed to adequately consume some fuel types. Ignitions shall not occur within watercourses, and control lines will be always maintained around pre-identified sensitive resources.

The IC will supervise holding resources and will designate a crew to monitor and patrol the burn area to ensure that spread is always contained within control lines. Necessary suppression activities shall be focused on all fire outside of control lines and/or areas where fire behavior poses an escape risk. The IC may also require monitoring, patrol, and holding resources overnight.

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

   ☐ Wildland-Urban Interface Fuel Reduction

   ☐ Fuel Break

   ☒ Ecological Restoration

10. **Treatment Activities** [*see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in Description of Project*]

   ☒ Prescribed (Broadcast) Burning, 18,233 acres

   ☒ Prescribed (Pile) Burning, 1 acres

   ☒ Mechanical Treatment, 10 acres

   ☒ Manual Treatment, 1 acres

   ☐ Prescribed Herbivory, _____ acres

   ☐ Herbicide Application, _____ acres

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

   ☒ Grass Fuel Type

   ☒ Shrub Fuel Type

   ☒ Tree Fuel Type

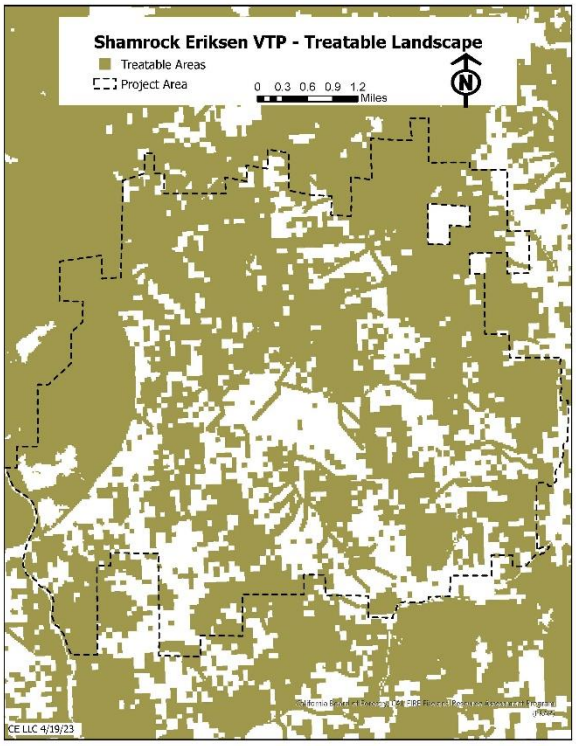
12. **Geographic Scope** [Refer to [to be determined] for a map of the CalVTP treatable landscape, check one box]

   ☐ The treatment site is entirely within the CalVTP treatable landscape

   ☒ The treatment site is NOT entirely within the CalVTP treatable landscape

   Approximately 2,374 acres of the 18,233-acre project area is mapped outside of the treatable landscape polygon associated with the CalVTP PEIR. The areas not encompassed by the treatable landscape polygon are dispersed in sections of the project area and include the Shamrock Ranch vineyard development and two reservoirs identified as the Twin Lakes. After onsite field evaluation and environmental analysis of the project area consistent with the CalVTP PEIR, it was determined that the entire project area, aside from the vineyards and lakes, is within the treatable landscape because the existing environmental conditions in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The vegetation, geology, and slopes are representatively the same as those sections of the project area within the treatable landscape. The entire project area is within the CAL FIRE State

Responsibility Area (SRA). There are no changes in vegetation type, composition and structure nor changes in fuel load/conditions relative to the adjacent areas of treatable landscape.



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

The project area, situated on two ownerships zoned as Rangeland (RL), is utilized for ranching, rural recreation, wildlife, and watershed values. Surrounding landowners use their land in a similar fashion.

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

Additional public agency approval is not required for project approval. During the development of the project California Department of Fish and Wildlife (CDFW), and the North Coast Regional Water Quality Control Board (NCRWQB) were consulted and asked to provide input on the vegetation treatments and their potential impact on water resources and special status species. Mendocino County Air Quality Management District (MCAQMD) will be consulted, and a smoke management plan prepared prior to burning operations.

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

The project area has been subject to several records checks and surveys over the past 35 years. A records search, tribal notification, on site meeting with tribal members, survey, and survey report were conducted for the VTP area by Alta Archaeology for the currently scheduled burn units. A discussion regarding specific cultural resources and a list of proposed protection measures are in the 2023 confidential Archaeological Survey Report for this project. If additional burn units are scheduled, another phase of archaeological review will be conducted.

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

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

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 landowners is 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 landowners to maintain the project area if desired.

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

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

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

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

Explanation:

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: 28E8C5BCF01E4BC... Date: 10/10/2023

Printed Name: George Morris III Title: Region Chief- Northern Region

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	☒
The project area is located near the community of Laytonville and is partially visible from neighboring ranches and along State Highway (SH) 101. The project area is located outside any scenic views of California's North Coast and large Redwood groves that reside along SH 101, thus those scenic vistas will not be impacted. Although some burn units may be noticeable after treatment, the degree of vegetation change is expected to be minimal and not impact the natural aesthetics or character of the landscape. Short-term vegetation charring will be noticeable but will be replaced by new plant growth during the next growing season. Prescribed burning will occur under ideal conditions for a low-intensity controlled mosaic burn; thus activities would be temporary. Smoke generated from prescribed burning will be short-term, and burning will adhere to a Smoke Management Plan (SMP) (SPR AQ-2) and a Burn Plan (SPR AQ-3). The equipment, vehicles, and any vegetation treatment debris associated with the activities proposed in this project will not block or disrupt views. *Potential temporary impacts to visual character during implementation of the treatments in the project are within the scope of the activities and impacts addressed in the PEIR.*						
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	Impact AES-2, 3.2	LTS	SPR AES- 1 SPR AES- 3 SPR AD- 4 SPR REC- 1	Yes	LTS	☒
The project area is partially visible from neighboring ranches and along SH 101, however it is outside the scenic vistas of California's North Coast and large Redwood groves that drivers along SH 101 may seek. There will be no long-term substantial degradation of the public view of the project area from along SH 101 or neighboring ranches. Significant impacts to landscape aesthetics are unlikely to occur as a result of this project. *Potential for these treatment types to result in long-term degradation of the visual character of an area was examined in the PEIR.*						
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or	Impact AES-3, 3.2	SU	MM AES- 3	No	N/A	☒

Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type						
Non-shaded fuel break treatments are not proposed for this project.						
Other Impacts to Aesthetics: Would the project result in other impacts to aesthetics that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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
Mechanical treatments are proposed to remove overgrown vegetation on skid trails, ranch roads, and control lines. Manual treatment is proposed as a site-specific measure to protect sensitive resources discovered during project implementation and on certain sections of burn plot perimeters as needed. Installation of any control lines will be constructed in irregular patterns along ridge tops and other topographical features, giving a feathered appearance to vegetation edges. No linear edges will be created during control line construction.			
SPR AES-2 Avoid Staging within Viewsheds: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Few public roads and trails are adjacent to the project area. One treatment unit (Unit 2) is adjacent to SH 101 and a common meeting and staging area is visible from SH 101 at the entrance to the Shamrock Ranch. It is difficult for drivers to see portions of Unit 2 and the front entrance staging area is partially obscured by the Shamrock Ranch main gate and a band of willows separating the staging area from SH 101. A few dozer transports may be visible from SH 101. Most of the staging required will occur much farther into the property away from SH 101 resulting in low visual impact. Unit 1 is also visible from SH 101 but is located 0.7 miles across a pasture, reducing the visibility of equipment and activities. A few neighboring ranches may get a glimpse of staging equipment. Most of the land adjacent to the project area is privately owned and the topography is variable with substantial vegetative screening from landscape vegetation. Staging outside of the project area will not likely be necessary.			
SPR AES-3 Provide Vegetation Screening: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Few public roads and trails are adjacent to the project area. One treatment unit (Unit 2) is adjacent to SH 101. A common meeting, briefing, and staging area is visible from SH 101 at the entrance to the Shamrock Ranch. It is difficult for drivers to see portions of Unit 2. The front entrance staging area is partially obscured by the Shamrock Ranch main gate and a band of willows separating the staging area from SH 101. Most equipment will be moved from the front entrance staging area, with only a few dozer transports visible from SH 101, to farther within the property away from SH 101 resulting in low visual impact. Unit 1 is also visible from SH 101 but is located 0.7 miles across a pasture, reducing the visibility of equipment and activities.			

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	
Non-shaded fuel break treatments are not proposed for this project.			

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	☒
Burn units are primarily comprised of grassland and woodland intermixed to a lesser extent with shrub vegetation types. Most of the woodland is classified as Montane Hardwood, along with Douglas Fir and Montane Hardwood-Conifer. Where stands of oak woodland exist within the burn units, forest duff, grass, and forbs are the primary understory vegetation targeted for burning. In the PEIR, the definition of forest land used to assess the potential for loss or conversion is "land that can support 10% native tree cover of any species under natural conditions." Therefore, to qualify as a loss or conversion, "forest land" must have its potential to support native overstory trees reduced below 10%. The conditions (fuel moisture, relative humidity, wind speed) under which this project will be implemented are unlikely to result in the conversion of forest land where overstory trees and forest stands exist within burn units. Where native overstory trees exist, fire may reasonably have a positive effect on their ability to maintain site occupancy, particularly oak woodlands. *Initial and maintenance treatments will encourage healthier forest conditions by removing competing vegetation. The treatments will protect forest and woodland from stand-replacing wildfire.* *The potential for treatment activities to result in the loss of forestland or conversion of forestland to non-forest use was examined in the PEIR.*						
Other Impacts to Agriculture and Forest Resources: Would the project result in other impacts to agriculture and forest resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒
The Farmland Mapping and Monitoring Program of the California Resources Agency identifies less than 50 acres of Unique Farmland in the southern portion of treatment Unit 5. This encompasses the Shamrock Ranch vineyard operations and ranch infrastructure and is adjacent to two residences, hence will be excluded with adequate buffers from the prescribed burning. Agricultural land was excluded from the						

treatable landscape, as wildfire risks within active agricultural production are considered negligible (CalVTP PEIR Section 3.3-7). Under this Project, CAL FIRE will not implement treatments on land classified as Unique Farmland.

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	LTSM	☒
The proposed project will utilize various vehicles, equipment, and power tools, and will use prescribed fire to conduct broadcast burns in the treatment area. Diesel- and gasoline-powered equipment are needed to create control lines, transport personnel and holding resources, fire ignition (e.g., terra torch and drip torches) and will generate emissions. Travel on dirt roads will also generate particulate matter. Emissions and particulate pollutants resulting from burn operations have the potential to exceed CAAQS or NAAQS thresholds and negatively affect nearby sensitive receptors. All aspects of this project (planning and implementation) are within the scope of impacts evaluated in the PEIR. Mitigation measures will be followed to the extent feasible by the project proponent to reduce emissions and particulate matter associated with this project. This will include only using the necessary amount of holding resources, encouraging carpooling to the project area, and using Best Available Control Technology for emission reductions for off-road equipment, diesel trucks, and generators.						
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4 SPR NOI- 5	Yes	LTS	☒
The operation of heavy equipment for maintaining control lines, operating fire engines to hold fire, and using diesel fuel mixture to ignite vegetation may expose people to diesel particulate matter emissions associated with this project. These potential exposure impacts were considered in the PEIR. Cumulative exposure risk to people will be limited because the acceptable burn window ranges from 3 to 7 days annually, operations personnel rotate shift on multi-day projects, and the environmental setting where this project will be implemented is away from population centers and sensitive receptors. One of the burn units borders SH 101. There are no pullouts or vista points, hence the public will remain in their vehicles and not be exposed to diesel particulate matter emissions as they drive by. All these factors reduce the exposure of people to diesel particulate matter emissions. *The potential to expose people to diesel particulate matter emissions was examined in the PEIR. Diesel particulate matter emissions from the proposed treatments are within the scope of the PEIR because the exposure potential is the same as analyzed in the PEIR, and the types and amount of equipment that would be used, as well as the duration of use, are consistent.*						

Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	LTS	SPR AQ-4, 5	Yes	LTS	☒
There are no known or mapped areas of NOA by the California Geologic Survey in the project area. Serpentine rock formations and serpentine-derived soils, which can be a source of naturally occurring asbestos, occur within the project area and were observed within burn Units 2 & 5, as shown in the habitat map in the botanical report for the project. The establishment of control lines with heavy equipment is not proposed through serpentine rock outcroppings or soils with serpentine parent material. If ground-disturbance becomes necessary in an area likely to contain NOA per CGS, an Asbestos Dust Control Plan will be prepared and approved by the local air district. *The potential to expose people to NOA-containing fugitive dust emissions was examined in the PEIR. Potential NOA exposure from the proposed treatments is within the scope of the activities and impacts addressed in the PEIR because the exposure potential is essentially the same within and outside the treatable landscape and avoidance of treatments in NOA-containing areas is consistent with the impacts analyzed in the PEIR.*						
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	☒
People working on the project may be exposed to toxic air contaminants (TAC) potentially present in the smoke generated by prescribed burning. The timing, duration, and burn intensities associated with this project are within the scope of impacts evaluated in the PEIR. All SPRs will be followed to reduce exposures. However, due to the uncertainty and site-specific nature of burn conditions, implementation of the SPRs may not fully eliminate exposure events to toxic air contaminants; thus, impacts are potentially significant and unavoidable. *The potential to expose people to toxic air contaminants emitted by prescribed burns was examined in the PEIR. Potential exposure to toxic air contaminants from the proposed prescribed burning is within the scope of the activities and impacts addressed in the PEIR because the exposure potential is essentially the same within and outside the treatable landscape and is consistent with the impacts analyzed 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	☒
The use of diesel-powered equipment and fuel for ignition during operations could expose people to objectionable odors from diesel exhaust. Diesel exhaust emissions would be temporary given the limited window of time to burn, and equipment idle time would be restricted. Additionally, emissions would dissipate rapidly from the source. Burn units are located away from populated areas and any sensitive receptors. *The potential to expose people to objectionable odors from diesel exhaust was examined in the PEIR. This impact is within the scope of the PEIR because the equipment that would be used and the duration of use under the proposed project are consistent with what was 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	☒

People working on the project may be exposed to objectionable odors from smoke during prescribed burning. Burning under ideal conditions will help limit exposure to smoke odor. All SPRs will be followed to reduce exposures. However, due to the uncertainty and site-specific nature of burn conditions, implementation of the SPRs may not fully eliminate exposure events to odorous smoke generated; thus, impacts are potentially significant and unavoidable. *The potential to expose people to objectionable odors from prescribed burning was examined in the PEIR. The duration and parameters of the prescribed burn and the exposure potential are consistent with the activities addressed 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 During	CAL FIRE
The project proponent will comply with all applicable air quality requirements and procedures outlined by Mendocino County Air Quality Management District and will generate an approved smoke management plan for all prescribed burning operations. *For activities other than prescribed fire, CAL FIRE is also committed to reducing diesel and gasoline emissions from equipment by implementing mitigations associated with AQ-1 where feasible. These include using gasoline-powered equipment instead of diesel, encouraging carpooling to the project area and using Best Available Control Technology for emission reductions for off-road equipment, diesel trucks, and generators.*			
SPR AQ-2 Submit Smoke Management Plan: This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
CAL FIRE will develop and submit a smoke management plan to the local air quality management district for approval prior to implementing a prescribed burn.			
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-During	CAL FIRE
A burn plan will be developed prior to 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 to assess fire behavior based on fuel types and weather conditions representing the upper-most limits for wind, temperature, and relative humidity that would be permissible for continuing the burn. The burn plan will be implemented by the Prescribed Fire Incident Commander (state certified burn boss).			

SPR AQ-4 Minimize Dust: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
Measures will be taken to reduce the amount of dust created. Vehicles and equipment travelling on dirt roads will be limited to 15 miles per hour. If road use creates excessive dust, the project proponent will treat roads with water or a non-toxic dust suppressant to a level necessary to control fugitive dust. The project proponent will remove visible dust, silt, and mud tracked-out onto public roadways if water is accessible. The project proponent will also remove dust, silt, and mud from vehicles at the end of each workday or at a minimum of every 24 hours for continuous treatment activities. Where there is visible dust transport outside the treatment area that may create a health hazard, the project proponent will suspend ground-disturbing treatment activities.			
SPR AQ-5 Avoid Naturally Occurring Asbestos: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
Ground disturbance will be limited to construction of a minimal amount of new control lines in the project area. Soils in the area are unlikely to contain NOA. Ground disturbance will be avoided in areas mapped as possible serpentine soils, or that appear to contain serpentine like soils.			
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
The Prescribed Fire IC will create an IAP that shall include burn dates, burn hours, weather limitations, the specific burn prescription, a communications plan, a medical plan, a traffic plan, and any special instructions relevant to maintaining health and safety of fire personnel, adjacent landowners, and the public. A designated safety officer will be assigned to monitor burn operations and weather conditions, and they will ensure CAL FIRE safety procedures are followed. In addition, a press release detailing the location, days, and burn hours for the project will be communicated to local media outlets to inform the public about the project at least 24 hours prior to commencement of firing operations.			
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 project proponent will reduce exhaust emission from vehicles and equipment by only using the necessary amount of holding resources, encouraging carpooling to the project area, and using Best Available Control Technology for emission reductions for off-road equipment and diesel trucks.			

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

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

Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, 3.5	LTS	SPR CUL-1, 7, 8	Yes	LTS	☒
Review of historic registers and inventories indicate that no historical landmarks or points of interest are present in the project area. No National Register listed, or eligible properties are located within a half-mile of the project area. Prescribed burning and mechanical treatments could damage historical resources. None of the built historic resources identified in the project area are eligible for listing in the California Registry of Historic Resources (CRHR). Therefore, they are not considered resources under CEQA. Historic structures will be avoided pursuant to SPR CUL-7. Under SPR CUL-8, workers will be trained regarding the protection of historical resources. Specific avoidance measures are listed in a confidential Archeological Survey Report.						
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	LTSM	☒
Archeological resources were identified within the project area as result of a California Historical Resources Information System records search and archeological field survey. To avoid significant adverse change to archeological resources through fuel reduction activities outlined in the project description, protection measures were developed to reduce the project impacts to a less than significant level. Specific avoidance and protection measures for these sites are listed in a confidential Archeological Survey Report prepared by ALTA Archaeological Consulting's Professional Archeologist and SPRs. CAL FIRE will include a cultural sensitivity and resource identification plan in the Operational Incident Action Plan (IAP). *The impact is within the scope of the PEIR, because treatment activities and intensity of ground disturbance of the project are consistent with those analyzed with those analyzed in the PEIR.*						
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, 3.5	LTS	SPR CUL-1, 2, 3, 5, 6, 8	No	N/A	☒
There are no tribal cultural resources in the project area.						
Impact CUL-4: Disturb Human Remains	Impact CUL-4, 3.5	LTS	N/A	Yes	LTS	☒
The project treatment activities include installing control lines and mechanical treatment activities with heavy equipment. Although unlikely, if human remains are encountered, the project would comply with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097. All work must stop in the immediate vicinity of the discovered remains and the County Coroner and a qualified archeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains be provided. *The potential for treatment activities to uncover human remains was examined in the PEIR. This impact is within the scope of the PEIR, because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. Additionally, consistent with the PEIR, the project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097 in the event of a discovery. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the*						

geographic extent presented in the PEIR. However, within the project area boundary, the potential for uncovering human remains during implementation of the treatment project is essentially the same within and outside the treatable landscape and treatment activities. Thus, the impact related to disturbance of human remains is also the same, as described above. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.						
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
CAL FIRE requested a records search (File Number 20-1229) January 4, 2021, at the Northwest Information Center (NWIC) located on the campus of Sonoma State University. The NWIC, an affiliate of the State of California Office of Historic Preservation is the official state repository of archaeological and historical records and reports for an 18-county area that includes Mendocino County. The records search included a review of all study reports and resources on file within the project area and within a 1/16th-mile radius of the Project. Sources consulted included archaeological site and survey base maps, survey reports, site records, and historic General Land Office (GLO) maps. ALTA archaeologists Nicholas Radtkey, Samantha Beck, Chris Beckham, and Sarah King-Narasimha conducted a field survey of the project area between October 17 and October 26, 2022. A total of 20 newly identified cultural resources were recorded as archeological sites, in addition to the 15 sites that were updated.			
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
Native American outreach followed the protocols outlined in Section 3.5-12 of Volume II: Program Environmental Impact Report, As Revised California Vegetation Treatment Program Final Program Environmental Impact Report (Ascent Environmental 2019). *ALTA archaeologist Nicholas Radtkey contacted the Native American Heritage Commission (NAHC) on September 16, 2022, to request a review of the Sacred Lands file for information on Native American cultural resources in the Project Area and to request a list of Native American contacts in this area. On September 19, the NAHC replied that a response would not be possible for between six and eight weeks due to staffing issues.*			

On September 17, 2022, outreach letters were sent to all tribes and individuals listed by the NAHC for Mendocino County. *On September 16, 2022, Nicholas Radtkey called Chairperson Mary Norris of the Cahto Tribe. Chairperson Norris expressed interest in having a representative of the tribe present during the survey. She forwarded Radtkey's contact information to Vernon Wilson, Cahto's tribal monitor in apprenticeship under the Sherwood Valley THPO. Wilson called Radtkey on the same day and further expressed interest in joining the field survey.* *Vernon Wilson and tribal elder Adelia Jack visited the Project Area with ALTA archaeologists on October 17, 2022. The field meeting included project personnel, archaeologists, and tribal members. The proposed project was described and discussed with tribal members.* *On November 6, 2022, the NAHC returned a reply to the outreach effort of September 16. NAHC Cultural Resources Analyst Cameron Vela indicated that the search of the Sacred Lands File was positive. Vela recommended contacting the Round Valley Indian Tribes (RVIT) for further information. On November 16, 2022, Radtkey called THPO Patricia Rabano about the project and its results. She indicated that RVIT would like to have tribal monitors on-site during project implementation, and that her department would like to receive a copy of this report.* *On April 27, 2023, Estelle Clifton sent a site notification letter to Mary Norris, Chairperson of the Cahto tribe. The purpose of the letter was to inform the tribe regarding the proposed site protection measures for the project. A follow-up phone call was placed on May 4 and May 5, 2023, to ensure that the letter was received and solicit input.* *On May 17, 2023, Estelle Clifton sent a site notification letters to additional tribal contacts listed on the CAL FIRE Native American Contact List for Mendocino County, Northern Division. The purpose of the letter was to inform the tribes not previously contacted regarding the proposed site protection measures for the project.* *To date, no other communications have occurred with tribal members. Attachment B of the confidential ASR provides copies of the Native American correspondences.*			
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 previously recorded site records and studies from the NWIC record search results, outreach to the NAHC, conversation with geographically affiliated Native American tribal representatives, reference materials, and conversations with the landowners.			
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
ALTA Archeological Consulting, LLC conducted a field survey of the project area between October 17 and October 26, 2022. A Confidential Archaeological Survey Report (ASR) prepared by ALTA Archaeological Consulting, LLC dated April 10, 2023, was provided to Mark Walker from Sonoma State University. Mr. Walker provided comments and recommendations on May 9, 2023, resulting in additional Native			

American letters and minor edits to the ASR, including recommending using the CAL FIRE mailing list for notifications (additional sent May 17, 2023 letters). The Confidential Archaeological Survey Report attached, dated June 15, 2023, discusses specific cultural resources and a list of potential effects and proposed protection measures (i.e., management recommendations).			
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
Management recommendations made by the qualified professional archaeologist include practices that will not result in adverse effects to cultural resources. Management recommendations are contained in the confidential ASR.			
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
No tribal cultural resources were found during the archeological survey. If a tribal cultural resource is identified during treatment activities, then SPR CUL-6 will apply.			
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
Built historical resources were identified within the treatment area, and the qualified professional archaeologist gave consultation on protection measures for these built historical resources. Management recommendations are contained in the ASR.			
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
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 During	CAL FIRE

EC-5: BIOLOGICAL RESOURCES

Pursuant to SPR BIO-1, a qualified RPF and qualified botanists conducted a data review of the project-specific biological resources, including habitat and vegetation types, and special-status plants, special-status wildlife, and sensitive habitats (i.e., sensitive natural communities and riparian habitats) with potential to occur in the project area.

The project area is in the Northern California Coast Ranges Ecological Section and ranges in elevation from approximately 1,140 feet to 3,500 feet. Habitat types in the project area are predominantly Montane Hardwood, Annual Grassland, and Montane Hardwood-Conifer with smaller acreages of Mixed Chaparral, Chamise-Redshank Chaparral, and Blue-Oak-Foothill Pine.

A list of special-status plant and wildlife species with potential to occur in the project area was compiled by completing a review of the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records for the U.S. Geological Survey (USGS) quadrangles containing and surrounding the project area (16 quadrangles total; CNDDB 2023; CNPS 2023); the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool (USFWS-a 2023); and Appendix BIO-3 (Table 10a, Table 10b) in the PEIR for special-status plants and wildlife that could occur in the Northern California Coast Ranges Ecological Section. A list of sensitive natural communities with potential to occur in the project area was compiled by completing a CNDDB search of the USGS quadrangles containing and surrounding the project area (CNDDB 2023), reviewing Table 3.6-18 in the PEIR for sensitive natural communities that could occur in the Northern California Coast Ranges Ecological Section in the habitat types mapped in the project area, and based on professional experience in similar landscapes of Mendocino County.

Botanists Estelle Clifton, Suzanne Thomas, Juan Mejia, and Sean Rowe conducted reconnaissance and focused surveys on July 29, 30, 31, and August 1, 2, 3, and 4, 2022 to identify and document sensitive resources (e.g., riparian habitat, sensitive natural communities) and to assess the suitability of habitat in the project area for special-status wildlife and plants. Mapped habitat types were verified where possible, all plant species observed were recorded, and observed streams, wet areas, and erosion points were mapped. Surveys prioritized those portions of the project more likely to be accessed for equipment staging and/or containment line construction. The Biological Resources Reconnaissance Survey results are located in Appendix B of this document.

	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	LTS	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			

Treatment activities including prescribed burning, manual treatments (i.e., handline construction), and mechanical treatments (i.e., control line construction, pretreatment, or maintenance) could result in direct or indirect adverse effects on special-status plant species either directly or through habitat modifications. Pursuant to SPR BIO-1, a qualified RPF/botanist performed a data review and identified 34 special-status plant species with a moderate to high potential to be found within the project area, as described in the Special Status Plant Species Table.

Pursuant to SPR BIO-7, impacts to habitats for special status plants which cannot be avoided by a treatment must have protocol-level surveys conducted prior to implementation of manual, mechanical, or prescribed burning treatment. If special-status plant species are observed during SPR BIO-7, Mitigation Measure BIO-1a and/or Mitigation Measure BIO-1b would be required, establishing no disturbance buffers around plants listed under California Endangered Species Act (CESA), federal Endangered Species Act (ESA), and other special-status plants. SPR BIO-7 applies to all treatment activities. Surveys would not be required for special-status plants not listed under the CESA or ESA, if the target special-status plant species is an herbaceous annual species, stump-sprouting species, or geophyte species, and the specific treatments may be carried out during the dormant season for that species or when the species has completed its annual life cycle, provided the treatment would not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment, or destroy seedbanks, stumps, or roots, rhizomes, bulbs and other underground parts of special-status plants. If it is infeasible to conduct treatments during the dormant season, focused surveys will be conducted in those areas where ground disturbing activities (i.e., dozer line) may occur.

14 of the 20 special-status plant species that may occur within the project area are herbaceous annual species or geophytes (Table 5.1). Impacts on these species would be avoided by treatment activities that do not kill or remove vegetation or disturb the soil during the dormant season (i.e., when the plant has no aboveground parts), which would typically occur after seed set and before germination. If treatments that do not kill or remove vegetation or disturb the soil cannot be completed in the dormant season and would be implemented during the growing period (generally March to September) of these annual and geophyte species, protocol surveys (per SPR BIO-7) and avoidance of any identified special status plants (per MM BIO-1a and BIO-1b) must be implemented. The remaining 6 of the 20 special-status plant species that have potential to occur within the project area are perennial species, which the qualified RPF has determined will benefit from project treatment activities, hence, protocol-level surveys under SPR BIO-7 would not be necessary to identify them before implementing treatment activities regardless of the timing of treatments.

Where special-status plants are identified during protocol-level surveys, MM BIO-1a or BIO-1b, depending on the species status, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which prescribed fire, and manual and mechanical treatment would not occur unless a qualified RPF or botanist determines, based on substantial evidence, that the species would not be harmed or would benefit from treatment in the occupied habitat area (Schelenz 2022). If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, under the specific conditions described in MM BIO-1a and

BIO-1b, additional impact minimization and avoidance measures or design alternatives to reduce impacts may be identified. A qualified RPF or botanist will evaluate the appropriate treatment design and frequency to maintain habitat function for the special-status plants.

Three special-status plant species – grass alisma, watershield, Baker's meadowfoam- have been identified previously or during the reconnaissance survey and are known to occur within the project area. This species suitable habitat is found in wet areas. Impacts to these species' habitat will be avoided through implementation of SPR HYD-4.

Table 5.1 Special-Status Plant Species in the Biological Resources Report: Biological Resources that May Occur in the Project Area (species in bold have been identified in the Project area)

Common Name	Scientific Name	Federal Status [1]	State Status [2]	CRPR [3]
grass alisma	***Alisma gramineum***	**-**	**-**	**2B.2**
Konocti manzanita	*Arctostaphylos manzanita ssp. elegans*	-	-	1B.3
watershield	***Brasenia schreberi***	**-**	**-**	**2B.3**
three-fingered morning glory	*Calystegia collina ssp. tridactylosa*	-	-	1B.2
serpentine cryptantha	*Cryptantha dissita*	-	-	1B.2
deep-scarred cryptantha	*Cryptantha excavata*	-	-	1B.1
Cascade downingia	*Downingia willamettensis*	-	-	2B.2
coast fawn lily	*Erythronium revolutum*	-	-	2B.2
Pacific gilia	*Gilia capitata ssp. pacifica*	-	-	1B.2
glandular western flax	*Hesperolinon adenophyllum*	-	-	1B.2
thin-lobed horkelia	*Horkelia tenuiloba*	-	-	1B.2
Baker's meadowfoam	***Limnanthes bakeri***	**-**	**SR**	**1B.1**
Baker's navarretia	*Navarretia leucocephala* ssp. *bakeri*	-	-	1B.1
white-flowered rein orchid	*Piperia candida*	-	-	1B.2
North Coast semaphore grass	*Pleuropogon hooverianus*	-	ST	1B.1
Nuttall's ribbon-leaved pondweed	*Potamogeton epihydrus*	-	-	2B.2
Bolander's catchfly	*Silene bolanderi*	-	-	1B.2
Hooker's catchfly	*Silene hookeri*	-	-	2B.2
oval-leaved viburnum	*Viburnum ellipticum*	-	-	2B.3
angel's hair lichen	*Ramalina thrausta*	-	-	2B.1

[1] Federal Status Definitions: FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate
[2] State Status Definitions: SE = State Endangered; ST = State Threatened; SR = State Rare
[3] California Rare Plant Ranks (CRPR):
1A Plants presumed extinct in California and rare/extinct elsewhere
1B Plant considered rare or endangered in California and elsewhere
2A Plant presumed extirpated in California but common elsewhere
2B Plant species considered rare, threatened, or endangered in California but more common elsewhere

3 Review List: Plants about which more information is needed
4 Watch List: Plants of limited distribution

CRPR Threat Ranks:
0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened; low degree and immediacy of threat or no current threats known)
Sources: CNDDB 2023, CNPS 2023

Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, 3.6	LTS/PSU (all wildlife species except bumble bees) LTS (bumble bees) PSU	SPR BIO-1, 2, 3, 4, 5, 8, 10, 11 SPR HYD-1, 3, 4, 5 SPR HAZ-5, 6 MM BIO-2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4	Yes	LTSM	☒

Treatment activities of prescribed burning, manual treatments (i.e., handline construction), and mechanical treatments (i.e., control line construction or maintenance) could result in direct or indirect adverse effects on special-status wildlife species either directly or through habitat modifications. The proposed actions associated with this project are within the scope of treatment activities analyzed in the PEIR. The Specific Project Requirements (SPRs) and Mitigation Measures (MM) are designed to identify habitat, consider critical life-history periods for special-status species, and avoid significant adverse impacts to special-status wildlife species within treatment areas. These SPRs and MMs will be followed during project planning activities and implementation and will result in the less than significant impacts.

Mitigation Measures BIO-2a and 2b will be employed to avoid mortality, injury, or disturbance to special status wildlife species by:

- *Avoiding treatment or disturbance activities within occupied habitats.*
- *Conducting treatment and/or disturbance activities outside the critical life history period (e.g., hibernation, denning, rearing, breeding seasons, etc.).*
- *Designing treatments to maintain habitat function and essential structural elements (e.g., cavities, nests, dens, resting structures, etc.) associated with a critical life-history periods (identified by a qualified RPF or other qualified personnel).*
- *Establishing a no-operations disturbance buffer surrounding currently occupied sites. Buffer size determined by established protocols and trustee agency guidance, or where relevant, by a qualified RPF or other qualified personnel.*

<u>Special-Status Amphibians</u>
Two special-status frog species have potential to occur in the project area: Pacific tailed frog and foothill yellow-legged frog. One special-status salamander – southern torrent salamander, and one special-status newt – red-bellied newt, also have potential to occur in the project area. Aquatic habitat potentially suitable for these species is present within Class I and Class II streams, ponds, and wet meadows in the

project area. Pacific tailed frog is associated closely with water and is rarely found more than a few meters from aquatic habitat. Ignitions will not occur in aquatic habitat and in watercourses supporting this species. Burning is unlikely to have a significant impact on this population. Foothill yellow-legged frog use of upland habitat and movement are poorly understood, however anecdotal observations suggest that the species utilizes upland habitat in relative proximity to streams, at least in more mesic parts of California (CDFW 2018), in aquatic habitat and in watercourses supporting this species. Burning is unlikely to have a significant impact on this population. The southern torrent salamander's movement is also poorly understood. Adult, red-bellied newts can travel over a mile across seasons but tend to remain in the same drainage soon after breeding. They prefer cold, clear, fast-moving streams with rocky bottoms and plenty of cover such as rocks, logs, and debris. They are often found in forested areas near the stream and may move onto land during wet weather. Red-bellied newts have been observed to move a couple hundred meters within a season (Thomson et al. 2016). Late fall/winter burning conditions often occur at a time when this species resides in subterranean rest sites. Burning is unlikely to have a significant impact on this population.

The potential for treatment activities to result in adverse effects on special-status amphibians was examined in the PEIR. Pursuant to SPR HYD-4, a WLPZ width of 50 to 150 feet adjacent to all Class I and II streams and lakes will be implemented for watercourse protection. Prior to treatment activities, a qualified RPF or biologist will survey the treatment area to identify and map streams and wet areas.

Habitat function for Pacific tailed frog, foothill yellow-legged frog, southern torrent salamander, and red-bellied newt would be maintained because pursuant to SPR HYD-4, treatments within stream WLPZs in and adjacent to the treatment area would be limited. In addition, the largest downed logs (up to three logs per acre) would be retained within the treatment areas. Ignitions will not occur in aquatic habitat and in watercourses supporting these species. Watercourse protection measures shall be adhered to at all times. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was included in the PEIR.

<u>Western Pond Turtle</u>
Aquatic habitat potentially suitable for western pond turtles is present within ponds and streams in and adjacent to the project area. This species may use sandy and sunny areas directly upland from streams for nesting and wintering in upland habitat under leaf litter.

The potential for treatment activities to result in adverse effects on western pond turtles was examined in the PEIR. Under SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and II streams and lakes would be implemented. WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established to all Class III and IV (e.g., drainage canals) streams. These measures may not avoid impacts on western pond turtles if turtles are present further than 150 feet from stream or lake habitat, are present within ponds >1 acre (i.e., not considered a lake under Forest Practice Rules), or if manual activities implemented within the WLPZ resulted in injury or mortality of turtles.

Under MM BIO-2b, because the qualified RPF has determined that treatment activities would be beneficial to special-status pond turtles, no compensatory mitigation will be required. Substantial evidence exists that habitat function of woodland is reasonably expected to improve with implementation of the treatment. Studies have also shown that Oregon white oak and California black oak in the North Coast Range are fire-enhanced species, and a minimum fire frequency of 3 to 5 years has been recommended to maintain oak dominance (Stephens et al. 2018). Substantial evidence exists that habitat function of grassland is reasonably expected to improve with implementation of treatment. For grassland habitat, prescribed burns increase plant diversity and species richness, particularly of native plants. The removal of the thatch

layer increases light penetration, soil temperature, and nutrient availability, supporting native endemic forbs which require light exposure to generate (DiTomaso and Johnson 2006).The western pond turtle would benefit from treatment in the occupied upland habitat area even though some of the species may be killed, injured, or disturbed during treatment activities, and the proposed project approach would be an exception in MM BIO-2b (CalVTP PEIR Sec. 3.6-149). The benefit of prescribed burning on the upland habitat of western pond turtle outweighs the cost of a severe, catastrophic wildfire that would destroy the woodland and grassland habitat in the project area. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more significant impact than what was covered in the PEIR.

<u>Other Special-Status Birds and Tree-Nesting Wildlife</u>
Four special-status bird species have potential to occur in the project area: northern goshawk, sharp-shinned hawk, yellow warbler, and yellow-breasted chat. One tree-nesting mammal – Sonoma tree vole, also has potential to occur in the project area. Sonoma tree voles breed year-round but mostly from February through September (Brylski and Harris, 1990).

Sonoma tree vole nests are typically built in larger-sized trees constructed out of Douglas-fir needles and may be situated on whorl of limbs against the trunk or at outer limits of branches. In young second growth Douglas-fir, the broken tops of trees are frequently used (Maser et al. 1981). Host trees are not targeted for treatment. Adverse effects on Sonoma tree voles are unlikely to occur and mitigation would not be required.

The potential for treatment activities to result in adverse effects on special-status birds and other special-status tree-nesting wildlife was examined in the PEIR. Treatment activities conducted during the nesting bird season (February 15 to August 15) could lead to direct loss of active nests if trees or shrubs containing nests are removed or burned. Adverse effects would be clearly avoided for treatments that would occur outside of the nesting bird season. If conducting treatments outside of the nesting bird season is determined to be infeasible the project proponent will implement BIO-12 to survey for active bird nests. If an active nest structure is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, during SPR BIO-12, it shall be retained. The project proponent will implement a feasible strategy to avoid disturbance of active nests (typically 100ft buffer for raptors). If a Sonoma tree vole nest is observed the nest tree will be retained with an appropriate avoidance buffer implemented. Indirect disturbances to active nests may occur from treatment activities including mechanical treatments, manual treatments, and prescribed burning, due to auditory and visual provocation (e.g., personnel, vehicles, equipment use) potentially resulting in abandonment or loss of eggs, chicks, or baby voles. Additionally, treatments within riparian habitat (which provides nesting habitat for the yellow warbler and yellow-breasted chat) that is included within a WLPZ would be limited pursuant to SPR HYD-4 (e.g., no mechanical treatment, retention of at least 75% surface cover).

Substantial evidence exists that habitat function of forest and woodland is reasonably expected to improve with implementation of the treatment. Historically, prior to fire suppression and logging, Douglas-fir-tanoak forests in the North Coast Range experienced fire return intervals between 4 to 6 years, which likely promoted open forests with greater cover of understory plant species. Studies have also shown that Oregon white oak and California black oak in the North Coast Range are fire-enhanced species, and a minimum fire frequency of 3 to 5 years has been recommended to maintain oak dominance (Stephens et al. 2018). These 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, and the proposed project approach would be an exception in MM BIO-2b (CalVTP PEIR Sec. 3.6-149). The benefit of

prescribed burning on the habitat of these special-status birds and the Sonoma tree vole outweighs the cost of a severe, stand-altering wildfire that would kill the forest and woodland habitat in the project area.

In addition, habitat function for special-status birds and Sonoma tree vole will be maintained because treatment activities will not result in removal of most trees greater than 12 inches DBH (i.e., trees most likely to be used by these species due to the cover provided by larger trees). Treatments within riparian habitat which could provide nesting habitat for special-status birds and that is included within a WLPZ would also be limited pursuant to SPR HYD-4. In combination with nesting bird surveys pursuant to BIO-12, the impact of the proposed project is consistent with the PEIR and would not constitute a substantially more sever significant impact than what was included in the PEIR.

Special-Status Bumble Bees

Two special-status bumble bees have potential to occur in the project area: Crotch's bumble bee and western bumble bee. Both bumble bee species were reinstated as candidates for listing as endangered under CESA by the California Fish and Game Commission on September 30, 2022. The two species have experienced declines in abundance and distribution and no longer exist across much of their historic range.

The potential for treatment activities to result in adverse effects on special-status bumble bees was examined in the PEIR. Habitat requirements for Bombus crotchii *are open grassland and scrub habitats while requirements for* Bombus occidentalis occidentalis *are meadows and grasslands with abundant floral resources (Hatfield et. al., 2018). The project area contains habitat suitable for bumble bee nesting, overwintering, and floral resources. Treatment activities could result in temporary removal of floral resources or in trampling, crushing, or removal of nesting or overwintering sites (e.g., woody debris).*

Pursuant to MM BIO-2g, prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season when feasible. Operationally this may not be feasible, as prescribed burning requires a narrow range of climatic conditions to ensure control and to meet the project objectives.

The project proposes to utilize prescribed fire as a restoration treatment for grasslands, chaparral, and understory vegetation within woodlands, creating a mosaic of variously burned vegetation and islands of unburned habitat. Habitat suitable for special-status bees would not be treated at once. Treatments will be conducted in a patchy pattern to the extent feasible in suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained. Prescribed burning is expected to have a positive effect on the richness and abundance of flowering plant species used by bees by increasing plant diversity, particularly of native plants. The removal of the thatch layer increases light penetration, soil temperature, and nutrient availability, supporting native endemic forbs which require light exposure to generate (DiTomaso and Johnson 2006). Greater floral diversity can benefit bee populations by providing a more balanced and continuous source of nutrition.

In addition, habitat function for Crotch's bumble bee and western bumble bee would be maintained, and reasonable expected to improve, because prescribed burning, and mechanical and manual treatment activities would retain large snags and logs, which would be the most likely nesting features to be used by special-status bumble bees, as well as clearing away leaf litter and debris making it easier to excavate and establish nests in the soil, and suitable habitat for the bumble bees in the project area would not be treated at once. Areas of unburned

floral resources will remain following prescribed burning as treatments are conducted in a mosaic pattern designed to retain habitat and suitable floral resources proximate to the treatment area. Herbicide application will not be used.

Pursuant to MM BIO-2a, the final determination for habitat function maintenance will be made by the project proponent. The project proponent may seek technical input from CDFW on their proposed measures to avoid injury to or mortality of these species. The PEIR concluded that impacts on special-status bumble bees would be potentially significant and unavoidable because it addressed the entirety of the treatable landscape across the state, so significant impacts cannot be ruled out. This impact would be less than significant and less severe than asserted in the PEIR.

Monarch Butterfly

The project area is within the monarch butterfly's overwintering, summer breeding and foraging range, and is a candidate species for Federal listing under ESA. The project area includes various natural habitats and floral resources that likely provide foraging or breeding habitat suitable for the species. Treatment activities could result in temporary removal of floral resources or direct mortality of the species.

The potential for treatment activities to result in adverse effects on monarch butterflies was examined in the PEIR. If management activities, such as mechanical vegetation removal and burning, are to occur in monarch breeding zones, it is recommended to occur from approximately November 1 through April 1 (USFWS-c 2023). Ideally, treatment activities will occur February through April, and it is highly unlikely that the monarch butterfly will be present in the project area in that timeframe (C.D. Pogue, USFWS, personal communication, April 11, 2023). Conducting some treatments November 1 through April 1 may be infeasible, and SPR BIO-10 will be required to be implemented prior to treatment activities when the species is listed. When the prescribed burn area is determined, a qualified RPF or botanist will conduct a focused survey for milkweed (breeding habitat) and the monarch butterfly. If focused surveys for milkweed and monarch butterflies conclude that the species is not present, then further mitigation for the species would not be required. If the species is detected during focused surveys or is assumed to be present, then MM BIO-2e will be implemented. Under MM BIO-2e, measures of protection include retention of host plants and conducting treatments in a patchwork design to retain floral resources and provide refuge for butterflies.

Habitat function of the monarch butterfly would be maintained because treatment activities would retain host plants for the species and because all habitat suitable for monarch in the project area would not be treated at once. Suitable habitat exists throughout the entire ownership of 16,233 acres. Approximately 200-300 acres will be burned each year, equivalent to less than 2% of the two ownerships and less than 4% of the entire project area. If the monarch butterfly is listed under ESA during the life of the project, then the final determination for maintaining habitat function will be made by the project proponent. The project proponent may seek technical input from USFWS on their proposed measures to avoid injury to or mortality of this species. This project impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Fish

Three special-status fish species may occur within the project area: Pacific lamprey, Coho salmon – Central California coast ESU, and steelhead – Northern California DPS, including Northern California DPS summer-run. The project's treatment units are in the Eel River watershed and drain into Class I watercourses – Outlet Creek, Long Valley, Creek, and Burger Creek. The potential for treatment activities to result in adverse effects on special-status fish was examined in the PEIR.

Pursuant to SPR HYD-4, WLPZs ranging from 50 to 150 feet adjacent to all Class I and II streams within the treatment areas will be implemented. At least 75 percent of surface cover will be retained. Equipment limitation zones (ELZs) will be designated adjacent to Class III and IV watercourses with required minimum widths per SPR HYD-4. A qualified RPF will describe the limitations of heavy equipment within the ELZ and will include additional protection measures where appropriate. Any exposure of soil from burning or soil disturbed in a watercourse crossing of Class II, II, or III within a WLPZ shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses that would adversely affect special-status fish.

Habitat function for special-status fish will be maintained because treatment activities will not occur within aquatic habitat and treatments within WLPZs adjacent to treatment areas will be limited pursuant to SPR HYD-4. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Bats

Three special-status bat species may occur within the project area: pallid bat, Townsend's big-eared bat, and western red bat. Habitat potentially suitable for these three species is present within forest habitat, rocky areas, and human-made structures (e.g., barns) in the project area. The potential for treatment activities to result in adverse effects on special-status bats was examined in the PEIR.

Per SPR BIO-1, if it's determined that adverse effects on special-status bats can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., maternity season), then mitigation would not be required. Adverse effects on special-status bat maternity roots would be avoided if treatment activities are implemented outside bat maternity season, April 1 to August 31 (Caltrans 2021). Prescribed burning, and mechanical and manual treatments, conducted within habitat suitable for bats during the bat maternity season could disturb active bat roosts from auditory and visual provocations (e.g., personnel, vehicles, equipment) or smoke from burning, potentially leading to abandonment of the roost and loss of young.

During nesting bird surveys per SPR BIO-12 surveys for maternal nesting roosts will be conducted at the same time. If a roost is observed, a no disturbance buffer of 100 feet would be established around active bat roosts.

Pursuant to SPR BIO-10, if presence of any of the special-status bats is assumed, then focused or protocol surveys may not be required. If it is not feasible to do a focused survey on the entire burn area prescribed each year, and forest or woodland habitat is in the prescription area, non-listed special-status bats may be killed, injured, or disturbed during treatment activities. Substantial evidence exists that habitat function of forest and woodland is reasonably expected to improve with implementation of the treatment. Historically, prior to fire suppression and logging, Douglas-fir-tanoak forests in the North Coast Range experienced fire return intervals between 4 to 6 years, which likely promoted open forests with greater cover of understory plant species. Studies have also shown that Oregon white oak and California black oak in the North Coast Range are fire-enhanced species, and a minimum fire frequency of 3 to 5 years has been recommended to maintain oak dominance (Stephens et al. 2018). These non-listed special-status wildlife would benefit from treatment in the assumed occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities, and the proposed project approach would utilize an exception described in MM BIO-2b (CalVTP PEIR Sec. 3.6-149). Furthermore, the short-term potential impacts of low intensity prescribed burning on these special-status bats outweigh the cost of a severe, stand-altering wildfire that would kill the forest and woodland habitat in the project area.

Habitat function for special-status bats will be maintained as treatment activities will not result in removal of most trees greater than 12 inches DBH or of all snags with large cavities, which are most likely the features to be used by these species. In addition, bat foraging habitat, including meadows and open water, would not be modified during treatments, and would thus be retained. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Treatments will not result in impacts to special status species based on implementation of applicable SPRs (BIO-1, BIO-12).

Pacific Fisher

The Pacific fisher is known to occur in the project area and in the vicinity. The species is a cavity-nester and inhabits cavities within live trees or snags, rock piles, or woody debris piles. The potential for treatment activities to result in adverse effects on the Pacific fisher was examined in the PEIR.

Potential habitat features that provide den sites suitable for the Pacific fisher would be avoided, as most live trees larger than 12 inches DBH would not be removed during treatment activities. Rocky areas will not be targeted for vegetation treatment. Downed woody debris as well as some large snags would potentially be removed during treatment activities.

Manual treatment (i.e., handline construction) would not result in adverse effects on fisher dens, as personnel would be on foot; the likelihood of a den being inadvertently destroyed would be very low. Mechanical treatments and prescribed burning conducted during the Pacific fisher's maternity season and young would be present in a den (March 1 to June 30) and within forest habitat suitable for fisher, could result in destruction of active dens in downed woody debris piles or snags, or disturbance to active dens potentially resulting in abandonment and loss of young, which may not yet be capable of fleeing. Adverse effects on fishers will be clearly avoided when mechanical treatments and prescribed burning occur outside of the maternity season.

The presence of fisher within the treatment area is assumed, and implementation of avoidance and minimization measures would be required pursuant to MM BIO-2b prior to and during implementation of mechanical treatments and prescribed burning between March 1 and June 30. Avoidance and minimization measures would include but not be limited to den surveys within 14 days prior to treatment activities. If a den or resting area is discovered during this critical period, operations shall cease within 100 feet, and CDFW will be consulted for avoidance measures. Potential denning and rest structures are not targeted for burning. Sufficient unburned habitat and refugia remain for escape of any fishers present during prescribed burn operations.

All habitat suitable for the Pacific fisher will not be treated at once. Suitable habitat exists throughout the entire ownership. Approximately 200-300 acres will be burned each year, equivalent to less than 2% of the two ownerships and less than 4% of the entire project area. This ecological restoration treatment would retain canopy cover, and treatment design would ensure enough young understory trees to facilitate forest regeneration and long-term maintenance of habitat function. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

American Badger

Habitat potentially suitable for American badger is present within annual grassland and open woodland in the project area. Prescribed burning, and mechanical and manual treatment activities could result in direct loss of active dens and potential loss of young possibly present in treatment areas. Manual treatment (i.e., handline construction) would not result in adverse effects on American badger dens, as personnel would be on foot; the likelihood of a den being inadvertently destroyed would be very low. There is a low probability that the American badger will be in the burn areas, as the species prefers to den in soft, pliable soil. The potential for treatment activities to result in adverse effects on the American badger was examined in the PEIR.

Habitat function for American badger will be maintained because habitat suitable for the species (i.e., grasslands, open woodlands) would be maintained and additional open woodland habitat would likely be restored through the removal of understory vegetation. The project proposes to utilize prescribed fire as a restoration treatment for grasslands, chaparral, and understory vegetation within woodlands, creating a mosaic of variously burned vegetation and islands of unburned habitat.

Pursuant to SPR BIO-10, if presence of the American badger is assumed, then focused surveys may not be required. If it is not feasible to do a focused survey on the entire 200-300-acre burn area prescribed each year, and grassland or open woodland habitat is in the annual burn area, there is potential for the American badger to be injured or disturbed during treatment activities. However, substantial evidence exists that habitat function of woodland is reasonably expected to improve with implementation of the treatment. Studies have shown that Oregon white oak and California black oak in the North Coast Range are fire-enhanced species, and a minimum fire frequency of 3 to 5 years has been recommended to maintain oak dominance (Stephens et al. 2018). Implementation of treatment activities are reasonably expected to improve habitat function, and all habitat suitable for American badger will not be treated at once. Suitable habitat exists throughout the entire ownership of 18,223 acres. Approximately 200-300 acres will be burned each year, equivalent to less than 2% of the two ownerships and less than 4% of the entire project area. The use of prescribed fire is not considered to have an adverse effect on badger populations, as it promotes the healthy function and maintenance of grassland ecosystems. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Conclusion

The project's burn design practices will maintain or improve habitat function for special-status wildlife species, as treatment units will occupy a small percentage of the landscape and are dispersed over a large area. Unburned refugia are maintained close to treatment units, the burn prescription shall create a mosaic of burned and unburned habitat within treatment units, approximately 4% of the units or less than 2% of the ownerships shall be burned annually, and key habitat structures and locations shall be retained and provided mitigations where necessary.

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	LTS	SPR BIO-1, 2, 3, 4, 5, 6, 8, 9 SPR HYD-4, 5 MM BIO-3a, 3b, 3c	Yes	LTSM	☒

Treatment activities of prescribed burning, manual treatments (i.e., handline construction), and mechanical treatments (i.e., control line construction or maintenance) could result in direct or indirect adverse effects on riparian habitat or other sensitive natural communities. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatments are proposed. Retreatment in too great a frequency could result in additional adverse effects.

Based on a review of vegetation mapping, aerial photos, species ranges, and a reconnaissance-level survey of the project biological resources pursuant to SPR BIO-1, 40 sensitive natural communities are anticipated to have the potential to be present within the project area. The sensitive natural communities, the associated rarity rank, and the CWHR habitat type within which the communities may occur are presented in the Biological Resources Report. A few oak woodland and forest types, which are sensitive habitats pursuant to the Oak Woodlands Conservation Act and PRC Section 21083.4, may occur in the project area.

During the 2022 late-season survey conducted pursuant to SPR BIO-1, -3, and -7, several species associated with these sensitive natural communities were observed, including bigleaf maple, box elder, buckeye, Pacific madrone, Douglas fir, tanoak, valley oak, interior live oak, red willow, California bay, hoary manzanita, common manzanita, blue wildrye, dense sedge, California oatgrass, Idaho fescue, seep monkey flower, and variegated clover. Sensitive natural communities were identified and mapped in the botanical survey report included in Biological Resources Report. While all dominant species associated with sensitive natural communities included in the biological survey report were not observed during the 2022 late-season survey, these communities may be present. Sensitive natural communities observed during the 2022 late-season survey include:

- *Bigleaf maple (*Acer macrophyllum*) Forest & Woodland Alliance, State Rarity S3*
- *California Buckeye (*Aesculus californica*) Forest & Woodland Alliance, State Rarity S3*
- *Madrone (*Arbutus menziesii*) Forest Alliance, State Rarity S4.2*
- *Tanoak (*Notholithocarpus densiflorus*) Forest Alliance, State Rarity S3.2*
- *Oregon White Oak (*Quercus garryana*) Forest & Woodland, State Rarity S3*
- *Valley Oak (*Quercus lobata*) Woodland Alliance, State Rarity S3*
- *California Black Oak (*Quercus kelloggii*) Forest & Woodland Alliance, State Rarity S4*
- *California Bay (*Umbellularia californica*) Forest & Woodland Alliance, State Rarity S3*
- *White Alder (*Alnus rhombifolia*) Forest & Woodland Alliance, State Rarity S4*
- *Hoary, common, and Stanford manzanita (*Arctostaphylos [canescens, manzanita, stanfordiana*]) Shrubland Alliance, State Rarity S3*
- *Canyon Live Oak – Interior Live Oak (*Quercus wislizeni – Quercus chrysolepis*) Chapparal, State Rarity S3S4*
- *California Brome – Blue Wildrye Prairie (*Bromus carinatus - Elymus glaucus*) Herbaceous Alliance, State Rarity S3*
- *Needle Spike Rush (*Eleocharis acicularis*) Herbaceous Alliance, State Rarity S2*
- *Blue Wild Rye Montane Meadow (*Elymus glaucus*) Herbaceous Alliance, State Rarity S3?*
- *Idaho Fescue – California Oatgrass Grassland (*Festuca idahoensis - Danthonia californica*) Herbaceous Alliance, State Rarity S3*

As noted above, various natural communities have evolved to depend on periodic fire, and as such, the project's burn design practices will not result in loss or degradation of sensitive natural communities. The low intensity burn prescription shall result in a partial removal of understory or groundcover vegetation and create a mosaic of burned and unburned habitat within treatment units. The treatment units are dispersed over a large area. The prescription burn will also lower the risks to natural communities associated with a larger, uncontrolled wildfire.

Mitigation Measures in BIO-3a will be employed to avoid loss and degradation of sensitive plant communities by:

- *Ensuring prescribed burn treatments stay within burn specifications to maintain/enhance oak woodland communities by targeting the understory fuels.*
- *Employing prescribed fire at a frequency and intensity to maintain/enhance native and sensitive plant communities thereby avoiding type conversion.*
- *Implementing watercourse and wet area protection measures to exclude heavy equipment and fire ignition activities (SPR HYD-4).*

Riparian habitat is present within the project area adjacent to streams, lakes, and ponds. Under SPR HYD-4, WLPZs from 50 to 150 feet would be established adjacent to all Class I and II streams and lakes would be implemented for prescribed burning, and manual and mechanical treatments, thus limiting the extent of treatment activities within riparian habitat. While these SPRs would reduce potential impacts on riparian habitat, the extent of riparian habitat within the treatment areas has not been mapped, and riparian habitat may be present outside of the areas incorporated within WLPZs. Thus, prior to executing treatment activities, SPR BIO-3 must be implemented to identify and map the extent of riparian habitat within the annual burn area. Pursuant to SPR BIO-4, treatments of riparian habitats would retain at least 75% of the overstory and 50% of the understory canopy of native riparian vegetation and would largely be limited to removal of uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants, encroaching upland species).

Mixed chaparral and chamise-redshank chaparral habitat are present within the project area. As required by SPR BIO-5, treatments implemented in chaparral will be designed to avoid type conversion of chaparral vegetation and to maintain chaparral habitat function. This will include identifying the chaparral vegetation types to the alliance level, determining appropriate treatment prescriptions based on current fire return interval departure and condition class of the chaparral vegetation alliance onsite, retaining at least 35% relative final density of mature chaparral vegetation, and retaining a mix of middle to older aged shrubs to maintain heterogeneity. Ecological restoration treatments will not be implemented in stands of chaparral vegetation that are within their natural fire return interval unless the project proponent demonstrates with substantial evidence that the habitat function of the chaparral vegetation alliances would be improved.

Avoiding treatments in these sensitive natural communities would avoid impacts. If avoidance is infeasible, MM BIO-3a would apply in these areas to ensure that the characteristics which qualify the communities as sensitive are retained post-treatment to the extent feasible. Qualifying characteristics include dominant canopy species, canopy relative percentage of dominant species, and species composition. Pursuant to MM BIO-3a, a qualified RPF or biologist would determine the natural fire regime, condition class, and fire return interval for each sensitive natural community. All treatment activities in sensitive natural communities would be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function.

Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, 3.6	LTS	SPR BIO-1 SPR HYD-1, 3, 4, MM BIO- 4	Yes	LTSM	☒
Treatment activities of prescribed burning, manual treatments (i.e., handline construction), and mechanical treatments (i.e., control line construction or maintenance) could result in direct or indirect adverse effects on state or federally protected wetlands.						

During the 2022 late-season survey, different types of aquatic habitat were observed and mapped, including ponds and streams of various sizes. Seeps and wet meadows were also observed during the survey. CAL FIRE's Fire and Resource Assessment Program (FRAP) land cover data for the project area includes approximately 8 acres of lacustrine habitat. The National Wetlands Inventory classifies the project area as having 47.1 acres riverine, 8.4 acres freshwater pond, and 0.5 acres of freshwater emergent wetland (USFWS-b). The FRAP vegetation data and National Wetlands Inventory data are provided here to provide a broad picture of aquatic habitat potentially present in the project area.

Under SPR HYD-4, WLPZs from 50 to 150 feet would be established adjacent to all Class I and II streams and lakes would be implemented for prescribed burning, and manual and mechanical treatments. WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and IV streams within the project for prescribed burning, and manual and mechanical treatments. Establishment of WLPZs would result in avoidance of all stream and pond habitat.

MM BIO-4 would apply to all treatment activities. Where mechanized impacts may occur, a qualified RPF or biologist will delineate the boundaries of wetlands (e.g., springs or seeps). The buffer would be a minimum width of 25 feet around the wetland feature and marked with high-visibility flagging, or existing landscape demarcations (e.g., edge of a roadway). Prescribed broadcast burning may be allowed to back into wetland habitat if it is determined by a qualified RPF or biologist that specific conditions pursuant to MM BIO-4 apply. No fire ignitions (nor use of associated accelerants) will occur within wetlands. A larger buffer may be required if wetlands or other aquatic habitats contain potentially suitable habitat for special-status plants or special-status wildlife It is assumed that additional wetlands may occur throughout the project area that are not currently identified or mapped. If additional wetlands are identified that weren't identified during BIO-1, they will receive the same protection measures as stated above.

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

Treatment activities of prescribed burning, manual treatments (i.e., handline construction), and mechanical treatments (i.e., control line construction or maintenance) could result in direct or indirect adverse effects on wildlife movement corridors or nurseries. The activities proposed in this project are consistent with the activities and potential impacts analyzed in the PEIR. Specific Project Requirements (SPRs) and Mitigation Measures (MMs) are designed to identify migration corridors and nursery areas for wildlife; protect and maintain their function, prior to, during and after treatment activities in a manner that minimizes impacts to a less than significant level.

The Shamrock Ranch and Eriksen Ranch have a large resident herd of transplanted Tule Elk. Native black-tailed deer are also numerous on the ranches. The species graze the open grasslands on the ranches as well as having free-range throughout the shrub and forest vegetation types. A diversity of fauna including mountain lions and fishers may migrate or disperse through the project area at various times.

The project's burn design practices will maintain or improve habitat and grazing and browsing opportunities for these species. Treatment units will occupy a small percentage of the landscape and are dispersed over a large area. Unburned refugia are maintained close to

treatment units, the burn prescription shall create a mosaic of burned and unburned habitat within treatment units, and approximately 4% of the units or less than 2% of the ownerships shall be burned annually. Migration corridors shall be retained, and treatment activities typically have a narrow operating window during the year (e.g., 3 to 7 days). *Under SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams and lakes would be implemented, limiting the extent of treatment activities within riparian habitat that would likely function as a wildlife movement corridor. Most live trees larger than 12 inches DBH would be retained. Pursuant to SPR BIO-3, -4, and -5, treatments in sensitive natural communities, riparian habitat, and chaparral habitat, respectively, would be designed to maintain habitat function of these communities. With implementation of SPRs, there would be no substantial change in the existing conditions that facilitate wildlife movement in the project area.* *Pre-treatment walk-throughs of the annual burn area will be conducted by the RPF for burn area-specific impacts, including observations of nurseries.*						
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	Impact BIO-6, 3.6	LTS	SPR BIO-1, 2, 3, 4, 5, 12	Yes	LTS	☒
Treatment activities of prescribed burning, manual treatments (i.e., handline construction), and mechanical treatments (i.e., control line construction or maintenance) could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife, such as nesting birds. Nesting habitat suitable for birds is present throughout the project area. Treatment activities conducted during the nesting bird season (February 15 to August 15) could result in the direct loss of active nests or disturbance to active nests from auditory and visual stimulus (e.g., personnel, vehicles, equipment) potentially resulting in abandonment and loss of eggs or chicks. *The qualified RPF determined that common nesting bird populations occupying project habitat will benefit from treatment in those areas even if the common nesting birds may be killed, injured, or disturbed during treatment activities. The project's burn design practices will maintain or improve habitat function for common nesting birds and raptors, as treatment units will occupy a small percentage of the landscape and are dispersed over a large area. Unburned refugia are maintained close to treatment units, the burn prescription shall create a mosaic of burned and unburned habitat within treatment units, approximately 4% of the units or less than 2% of the ownerships shall be burned annually, and key habitat structures and locations shall be retained and provided mitigations where necessary.* *As included in the CalVTP PEIR Sec. 3.6-126, implementation of avoidance strategies for common nesting birds does not preclude completing the prescribed burning treatment within the project-specific burn season (February through May), during which vegetation moisture, weather, wind, and other physical conditions are suitable.* *A qualified RPF, designee, biologist, or biologist technician will conduct a survey for raptor nests as part of the pre-treatment walk-through of the annual burn area, and that qualified person will monitor any active raptor nest(s) during treatment activities. Trees with visible raptor nests, whether occupied or not, will be retained, and a 100-ft avoidance buffer implemented.*						
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, 3.6	Np Impact	SPR AD- 3	No	N/A	☒

There are no local policies or ordinances protecting biological resources in Mendocino County that are 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	☒
The project area is not covered by a Natural Communities Conservation Plan, Habitat Conservation Plan, or other approved habitat plan (e.g., state or federal Safe Harbor Agreement).						
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-During	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.			
A qualified RPF and qualified botanists conducted a data review of the project-specific biological resources, including habitat and vegetation types, and special-status plants, special-status wildlife, and sensitive habitats (i.e., sensitive natural communities and riparian habitats) with potential to occur in the project area. *A list of special-status plant and wildlife species with potential to occur in the project area was compiled by completing a review of the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records for the U.S. Geological Survey (USGS) quadrangles containing and surrounding the project area (16 quadrangles total; CNDDB 2023; CNPS 2023); the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool (USFWS-a 2023); and Appendix BIO-3 (Table 10a, Table 10b) in the PEIR for special-status plants and wildlife that could occur in the Northern California Coast Ranges Ecological Section. A list of sensitive natural communities with potential to occur in the project area was compiled by completing a CNDDB search of the USGS quadrangles containing and surrounding the project area (CNDDB 2023) and reviewing Table 3.6-18 in the PEIR for sensitive natural communities that could occur in the Northern California Coast Ranges Ecological Section in the habitat types mapped in the project area.*			

Early and late-season biological surveys of treatment units 1, 2, and 3 were conducted in 2022/2023. Units 4,5 and 7 were included in this late-season survey. An early-season survey of Units 4, 5 and 7 is needed prior to treatment activities, and both early and late-season surveys are needed for Unit 6. See the Late Season Biological Survey attached. Further review and survey will include pre-treatment walk-throughs of the annual burn area by a qualified RPF for burn area-specific impacts. Burn-area specific resources to survey and potentially flag with no-disturbance buffers include landslides, streams, raptor nests, nursery sites, monarch butterfly breeding habitat (i.e., milkweed), and early-season flowering annual special-status plants. Any observations of special-status wildlife will also be recorded and considered for a no-disturbance buffer. *In addition, project letters were sent on April 14, 2023, to the California Department of Fish and Wildlife and the North Coast Regional Water Quality Control Board requesting assistance or information that would be helpful for project design. A response was received on May 12, 2023, from CDFW with no concerns on the project. As of August 4, 2023, no response has been received from NCRWQCB.*			
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
A qualified RPF or biologist will meet with the project proponent crew members and contractors. Following the pre-treatment walk-through of the annual burn area by a qualified RPF, a project description worksheet will be distributed to all operational personnel and reviewed in the field for each treatment area prior to the initiation of operations. These documents will contain specific actions and/or avoidance measures that shall be followed to protect sensitive biological and/or cultural resources.			
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
Adverse effects to sensitive habitats and sensitive natural communities present within treatment areas can be avoided by including Mitigation Measures in BIO-3a: • *Ensuring prescribed burn treatments stay within burn specifications to maintain/enhance oak woodland communities by targeting the understory fuels.* • *Employing prescribed fire at a frequency and intensity to maintain/enhance native and sensitive plant communities thereby avoiding type conversion.* • *Implementing watercourse and wet area protection measures to exclude heavy equipment and fire ignition activities (SPR HYD-4).*			
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 Prior	CAL FIRE
In general, implementation of watercourse and wet area protection measures, including exclusion of heavy equipment and fire ignition, will be followed per SPR HYD-4. Treatment areas are generally located in upland habitat away from Class I watercourses. Class III watercourses are located throughout the project area. Any potential handline for a fire break needed in a Class I protection area will be focused on removal of understory vegetation and ladder fuels (8 inches DBH or less). At least 75% of the overstory and 50% of the			

understory canopy of native riparian vegetation within the riparian habitat will be retained. Treatments will be limited to uncharacteristic fuel loads (e.g., dead or dying vegetation, invasive plants), trimming, and selective thinning. 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 and return the riparian community to a natural fire regime.			
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 Prior-During	CAL FIRE
The project considers the timing, burn specification, vegetation type, and previous burn history when planning burns in specific treatment areas, thus avoiding fire frequencies harmful to the perpetuation of native vegetation which the burn plan seeks to promote. Ecological restoration treatments will not be implemented in stands of chaparral vegetation that are within their natural fire return interval unless the project proponent demonstrates with substantial evidence that the habitat function of the chaparral vegetation alliances would be improved.			
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle). This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During-Post	CAL FIRE
*All operations personnel and equipment shall follow standard practices to prevent translocation and spread of plant and other forest pathogens that may be present in the area as identified by the Mendocino County Agricultural Commissioner and CAL FIRE Forest Pathologist. These practices may include but are not limited to washing and/or disinfecting equipment, vehicles, shoes, clothes, chainsaws, shovels, or other equipment prior to arriving on the project. If evidence of Sudden Oak Death (*Phytophthora ramorum*) is observed during treatment activities, crew members will inform the crew supervisor or project lead.*			
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	CAL FIRE
A protocol-level survey of special status plants was conducted in the early and late-season for treatment units 1, 2, and 3. Units 4, 5 and 7 were included in this late-season survey. An early-season survey of Units 4, 5 and 7, and both early and late-season surveys for Unit 6, will be conducted as there is suitable habitat for a variety of special-status plant species throughout the treatment areas. Refer to the Biological Resources Report.			
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	

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 Prior-During	CAL FIRE
All operations personnel and equipment shall follow standard practices to prevent translocation and spread of invasive plants, noxious weeds, and invasive wildlife. These practices may include but are not limited to washing and disinfecting equipment, vehicles, shoes, clothes, chainsaws, shovels, or other equipment prior to arriving and leaving the project area. *During reconnaissance and focused surveys, barbed goat grass was observed in the project area, along the eastern edge of Unit 1 and in the western half of Unit 5. Prior to treatment in this vicinity, a qualified RPF or botanist will be consulted to ensure the invasive plant species does not put sensitive habitats at risk or is spread. As prescribed burning of this invasive plant species has the potential to increase its germination, burning must occur such that seed kill is ensured, and a second-year management strategy may be needed (DiTomaso et al. 2013). Alternatively, a qualified RPF or botanist will recommend a mechanical vegetation management treatment.* *French broom was also identified along the main road that travels towards Units 3 & 5. Prior to treatment in the vicinity of this species a qualified RPF or botanist will be consulted to ensure the invasive plant species does not put sensitive habitats at risk or is spread.*			
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	CAL FIRE
In accordance with SPR BIO-10, the qualified RPF determined that focused or protocol surveys for all special-status species with potential to occur in the treatment area are not required, depending on the timing of the annual burn prescription, with the exception to milkweed (breeding habitat) and for the Monarch Butterfly. As detailed above, it is anticipated that the treatment activities will not lead to loss of special-status wildlife that would substantially reduce the number or restrict the range, or to degradation of occupied habitat. During pre-treatment walk-through of the annual burn area by the RPF, within 14 days prior to any project preparation, any observations of special-status wildlife and nursery sites will be recorded and considered for a no-disturbance buffer (50-100-ft based on the standard for that species).			
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	
Prescribed herbivory is not a treatment type proposed for 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
The qualified RPF determined that common nesting bird populations occupying project habitat will benefit from treatment in those areas even if the common nesting birds may be killed, injured, or disturbed during treatment activities. All habitat suitable for common nesting birds will not be treated at once. Suitable habitat exists throughout the entire ownership of 18,233 acres. Approximately 200-300 acres will be burned each year, equivalent to less than 2% of the ownerships and less than 4% of the entire project area. Implementation of treatment activities are reasonably expected to improve habitat function. *A qualified RPF, biologist, or biologist technician will conduct a survey for raptor nests, and that qualified person will monitor any active raptor nest(s) during treatment activities. Trees with visible raptor nests, whether occupied or not, will be retained.*			
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
If special-status listed plant are determined to be present within the annual burn area, then a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which prescribed fire, and manual and mechanical treatment would not occur unless a qualified RPF or botanist determines that the species would not be harmed or would benefit from treatment in the occupied habitat area. In the case of plants listed pursuant to CESA or ESA, the determination of beneficial effects would be made in consultation with CDFW and/or USFWS, depending on species status. If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, under the specific conditions described in MM BIO-1a, additional impact minimization and avoidance measures or design alternatives to reduce impacts will be identified. A qualified RPF or botanist will evaluate the appropriate treatment design and frequency to maintain habitat function for the special-status plants.			
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
If non-listed special-status plant species (CA Rare Plant ranks 1A, 1B, 2A, or 2B) are determined to be present within the annual burn area, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which prescribed fire, and manual and mechanical treatment would not occur unless a qualified RPF or botanist determines that the species would not be harmed or would benefit from treatment in the occupied habitat area. If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, under the specific conditions described in MM BIO-1b, additional impact minimization and avoidance			

measures or design alternatives to reduce impacts will be identified. A qualified RPF or botanist will evaluate the appropriate treatment design and frequency to maintain habitat function for the special-status plants.			
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	
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
If listed or fully-protected wildlife species are observed during reconnaissance surveys or focused surveys, including pre-treatment walk-through of the burn area each year, the project proponent will implement measures to avoid direct mortality, injury or disturbance including: 1) establish a minimum 100-ft spatial buffer around locations where a listed species is present (dens, roosts, nests, rest locations, nurseries, and temporary refugia, etc.); larger buffers may be necessary based on a species' sensitivity, biological requirements, and agency guidelines; or 2) restrict operations to non-critical periods of a species' life cycle (e.g. non-breeding season: September 1 – January 31) if feasible. *General operating practices incorporated into the design of the burn plan that maintain habitat function for listed wildlife species include: 1) the burn prescription shall create a mosaic of burned and unburned habitat within treatment units; 2) treatment units will occupy a small percentage of the landscape and are dispersed over a large area such that unburned refugia are maintained close to treatment units; 3) key habitat structures and locations such as nests, snags, cavity trees, basal hollows, rock caves, large and course woody debris, and overstory trees, shall be retained (and protected if necessary when the prescription would significantly alter or destroy them).*			
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

If other special-status wildlife species are observed during reconnaissance surveys or focused surveys, including pre-treatment walk-through of the burn area each year, the project proponent will implement measures to avoid direct mortality, injury or disturbance including: 1) establish a minimum 100-ft spatial buffer around locations where a listed species is present (dens, roosts, nests, rest locations, nurseries, and temporary refugia, etc.); larger buffers may be necessary based on a species' sensitivity, biological requirements, and agency guidelines; or 2) restrict operations to non-critical periods of a species' life cycle (e.g. non-breeding season: September 1 – January 31) if feasible. *General operating practices incorporated into the design of the burn plan that maintain or improve habitat function for listed wildlife species include: 1) the burn prescription shall create a mosaic of burned and unburned habitat within treatment units; 2) treatment units will occupy a small percentage of the landscape and are dispersed over a large area such that unburned refugia are maintained close to treatment units; 3) key habitat structures and locations such as nests, snags, cavity trees, basal hollows, rock caves, large and course woody debris, and overstory trees, shall be retained (and protected if necessary when the prescription would significantly alter or destroy them).* *If it is not feasible for the project proponent to do a focused survey on the entire 200-300-acre burn area prescribed each year, non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. 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, the proposed project approach would be an exception in MM BIO-2b. It has been demonstrated above with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment. It is determined that treatment activities would be beneficial to special-status wildlife, and no compensatory mitigation is required.*			
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	
MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)	No	CAL FIRE N/A	
This project is outside the known historic range of Valley Elderberry Longhorn Beetle.			

MM BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.	Yes	CAL FIRE Prior-During	CAL FIRE
The monarch butterfly was identified as a possible species present within the project area. Treatment activities will be conducted in a patchwork design to retain floral resources and provide refuge for butterflies. All habitat suitable for monarch butterflies in the project area would not be treated at once. If milkweed is observed, it will flagged and avoided.			
MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)	No	CAL FIRE N/A	
No special-status beetles, flies, grasshoppers, or snails are known to have overlapping ranges with the project area.			
MM BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities) The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.	Yes	CAL FIRE Prior-During	CAL FIRE
The western bumble bee and Crotch's bumble bee were identified as possible species present within the project area. The project is expected to maintain or enhance native floral resources, grasses, forbs, and herbs, some of which are plant species utilized as forage by these species. *The qualified RPF determined that the project's design practices will likely improve overall habitat function for western and Crotch's bumble bee populations potentially occupying project habitat, and the species will benefit from treatment in those areas. Treatment units will occupy a small percentage of the landscape and are dispersed over a large area. Unburned refugia are maintained close to treatment units, the burn prescription shall create a mosaic of burned and unburned habitat within treatment units, and approximately 4% of the units or less than 2% of the ownerships shall be burned annually. Wet areas will be avoided and movement corridors between suitable habitat patches will be improved.*			
MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)	No	CAL FIRE N/A	
Prescribed herbivory is not a treatment in 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:	Yes	CAL FIRE Prior-During	CAL FIRE

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.			
Treatment activities will be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. The fire prescription is designed to burn the understory components of oak woodlands including grasslands, shrubs, small trees, woody debris on the forest floor, and understory herbs and forbs. Burning will also enhance nutrient cycling to promote native understory plants and maintain oak woodlands. Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval.			
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	
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	
MM BIO-4: Avoid State and Federally Protected Wetlands	Yes	CAL FIRE Prior-During	CAL FIRE
A qualified RPF or biologist will delineate the boundaries of ponds, seasonal wetland, springs, and seeps, establishing an appropriate buffer (minimum of 25 feet), and marking the buffer boundary with high-visibility flagging, fencing, stakes or clear, existing landscape demarcations (e.g., edge of a roadway). These buffers will generally be no-disturbance buffers. Prescribed broadcast burning may occur if no special-status species are present in the wetland habitat, wetland habitat function would be maintained, the prescribed burn is within the normal fire return interval for the wetland vegetation types present, fire containment lines and pile burning are prohibited within the buffer, and no fire ignition will occur within the wetland buffer.			
MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites	Yes	CAL FIRE Prior-During	CAL FIRE
A qualified RPF or biologist will conduct a pre-treatment walk-through of the annual burn area to survey a variety of resources including wildlife. If nursery habitat is identified, the following may be implemented based on site-specific circumstances and conditions: 1) if occupied, a protective buffer will be established (minimum 100 feet) as appropriate for the species and life-stage present to avoid disturbance; 2) if unoccupied and operations are proposed for a non-critical period, then the habitat structure shall be retained to ensure future use and functionality.			

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	☒

The project area is in the Northern Coastal Ranges geomorphic province, which is characterized by relatively low mountain ranges and associated valleys that trend northwest, subparallel to the active San Andreas Fault. The Coast Ranges are predominantly composed of thick late Mesozoic and Cenozoic (251 million years ago to present) sedimentary rock. The project is located just east of the north section of the Maacama Fault, a segment of the Hayward Fault subsystem of the San Andreas Fault zone. The rocks of the Coast Ranges are composed of the Franciscan Complex, which formed as a massive pile of rock and sediment in an ancient subduction zone, and most of which is a sheared matrix with large blocks of various rock types (Fuller 2015).

The geology of the project area consists of sandstone soils and shale loams. No soil survey data exists for Shamrock Ranch as the property did not participate in NRCS soil surveys of Mendocino County, Eastern Part. A slope model was generated in ESRI ArcMap using a 1/3-arcsecond digital elevation model (DEM) to assess steepness throughout the project area. A review of the California Department of Conservation's Division of Mines and Geology landslide inventory for the project area reveals a history of disrupted ground, debris slides, and other landslide types (CDC 2023). Vegetation removal via prescribed burning and control line construction can create soil disturbance and may increase the risk of landslides. Landforms within the project area include: 2,316.3 acres of land that are <20% slope; 2,014 acres that are between 20-30% slope; and 401.7 acres that are greater than 30% slope. Overall, the project area consists of relatively steep landforms, and over half (51%) of the project area is greater than 20% slope. A qualified RPF or qualified geologist will use the slope model to inform assessments of the annual burn area and treatment design prior to operations.

Prescribed burning, mechanical treatment, and manual treatment have the potential to cause erosion and loss of topsoil. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. Mechanical treatments using heavy machinery are the most likely to create soil disturbance that could lead to erosion or loss of topsoil, especially in areas with steep slopes. Application of SPRs GEO-1 through GEO-8, AQ-3, AQ-4, and HYD-4 will avoid and minimize any substantial soil erosion or loss of topsoil during treatment activities. A qualified RPF, qualified geologist, or their designee will be consulted prior to the construction of any proposed control lines or check lines that are not on existing truck and tractor roads, to minimize erosion caused by mechanical treatments. A qualified RPF, qualified geologist, or their designee will assess the treatment area prior to operations to reduce the potential for landslides and erosion in the project area. All truck and tractor roads are required to have adequate drainage structures installed after operations per SPR GEO-4 & SPR GEO-5.

To determine the spacing of erosion control structures, an erosion hazard ratings (EHR) analysis and water bar spacing table have been generated based on road gradient. Because mapped soil data does not exist for most of the Project, the assigned EHRs for the Project were based on a review of other soil types near the Project. For the purposes of erosion control on truck and tractor roads, a moderate EHR shall be applied within the Project, unless a location shows evidence of past soil loss such as riling or potential serpentine soils, then a High or Extreme EHR will be used. During biological reconnaissance surveys, some potential serpentine soils were observed, and mapped. When serpentine appearing soils are encountered, that are not on the biological reconnaissance map, the project proponent will treat such areas as having a High or Extreme erosion hazard rating (EHR).

Maximum Distance Between Waterbreaks

	Road Gradient			
Estimated Hazard Rating	10% or less	11-25%	26-50%	>50%
Moderate	200’	150’	100’	50’
High	150’	100’	75’	50’
Extreme	100’	75’	50’	50’

Impact GEO-2: Increase Risk of Landslide	Impact Geo-2, 3.7	LTS	SPR GEO-3, 4, 7, 8, SPR AQ- 3	Yes	LTS	☒
A qualified RPF or geologist will assess the treatment area prior to operations for potential landslides and on slopes over 50% to avoid unstable areas. No new roads will be constructed, and heavy equipment use will be limited to maintenance of existing roads and skid trails. If under an emergency situation, new control lines need to be constructed, heavy equipment may only be used on slopes less than 50%. Handline construction may be used on slopes greater than 50%, or where sensitive resources (e.g., wet areas, Class III watercourses, unstable areas, etc.) necessitate such action. Application of SPR GEO-3, GEO-4, GEO-7, GEO-8, and AQ-3 will avoid and minimize landslide risk during treatment activities.						
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 During	CAL FIRE
Mechanical treatment will be limited to the maintenance of existing roads and skid trails and a limited number of new control or check lines. Erosion control structures shall be installed, if deemed necessary by the RPF, and mechanical treatment will be suspended if there is a "chance" of rain within the next 24 hours, until precipitation stops and soils are no longer saturated.			
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
Mechanical treatment with the use of heavy equipment will be limited to the maintenance of existing roads and skid trails. Areas with saturated soils will be avoided until the soil structure is more stable.			
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-Post	CAL FIRE
Mechanical treatment with the use of heavy equipment will be limited to the maintenance of existing roads and skid trails, thus creating soil disturbance necessitating erosion control structures installation per the EHR discussion and table in Impact GEO-1 above. Prescribed burning is designed to not result in exposure of bare soil over 50% or more of the treatment area. Fires that burn with low severity can maintain soil cover. The project will create a low to moderate intensity fire for a mosaic burn in the treatment areas. *Post treatment, a qualified RPF will review the treatment area to assess the potential for substantial sediment discharge into a watercourse, as a result of exposure of bare soils. Any area identified as having a potential for substantial sediment discharge shall be treated per SPR GEO-4 (prior to the rainy season). Stabilization treatments such as organic material from mastication or mulch will be incorporated into at least 75% of the disturbed soil surface where soil erosion hazard is moderate or high, and 50% of the disturbed soil surface where the soil erosion hazard is low to help prevent erosion.*			
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-Post	CAL FIRE
If post-burn inspection reveals that erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. In addition, after the first large storm or rainfall event, (i.e.., ≥ 1.5 inches in 24 hours), an inspection for			

evidence of erosion will be conducted by a qualified RPF or their supervised designee as soon as is feasible. The qualified RPF shall also determine the interval and duration of erosion control structure monitoring.			
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 SPR HYD-4. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	Yes	CAL FIRE During-Post	CAL FIRE
Water breaks will be installed and maintained on seasonal roads and skid trails used for firing operations, and established control lines, to minimize soil loss utilizing the spacing and erosion control guidelines as defined in Impact GEO-1 above and SPR HYD-4. Standards to follow include the maximum distance between water breaks depending on EHR and slope percent, and the design of water breaks across roads to facilitate proper drainage. A waterbar design specification is included in Attachment B.			
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 During	CAL FIRE
Burn piles are only proposed in areas where pre-treatment fuel loads are high and/or sensitive resources are present that could be impacted by prescribed broadcast burning. Piles will stay well within the 20-foot diameter restriction. Pile burning will be applied minimally on the project and are anticipated to occupy less than 5% of the treatment area. Burn piles will not be in WLPZs as defined in SPR HYD-4.			
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 During	CAL FIRE
Heavy equipment will be prohibited from traversing slopes steeper than 50%. Any slopes greater than 50% that require a control line shall be constructed by hand crews.			
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
As part of the pre-treatment walk-through of burn areas, a qualified RPF or geologist will evaluate the area and identify where potential landslides may occur or where unstable soil exists. A licensed geologist will be consulted if unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment.			

EC-7: GREENHOUSE GAS EMISSIONS

	Identify location of impact	Identify impact Significance in the PEIR	SPRs & MMs applicable to the	Does the Impact Apply to the project		No New Impact

	Analysis in the PEIR		impact analysis in PEIR	Treatments proposed	Identify Impact Significance for the Treatment Project	
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	☒
Prescribed burning and the use of vehicles and equipment during treatment activities will emit greenhouse gases. This project will utilize prescribed fire for ecological restoration and is consistent with applicable plans to reduce greenhouse gas emissions statewide as it aims to reduce the likelihood of catastrophic wildfires. Such an event would create immense GHG emissions in a short time span. This impact is within the scope of the PEIR because the proposed activities, associated equipment, duration of use, and the resulting GHG emissions are consistent with those analyzed in the PEIR. This project is a registered offset project under the Board's Assembly Bill 1504 Carbon Inventory Process; hence SPR GHG-1 is applicable.						
Impact GHG-2: Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, 3.8	PSU	SPR AQ- 3 MM GHG- 2	Yes	PSU	☒
The prescribed fuel treatments would result in GHG emissions directly generated by off-road equipment, on-road vehicles, and machine-powered hand tools, as well as from the combustion of vegetation during prescribed burning. Worker commute trips and hauling of equipment and materials associated with treatment activities would also directly generate GHG emissions. These activities and treatments were evaluated and are within the scope of the impacts considered in the PEIR. Potential GHG emissions were also calculated for project activities and treatment types.						
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
The First Order Fire Effects Model (FOFEM) was used to determine the amount and type of emissions likely to occur with prescribed burning. Emission calculations for prescribed burning are based on factors including fuel models, fuel conditions and expected fuel			

consumption in tons per acre. Emission calculations for motorized equipment and vehicles are based on the California Air Resource Board emissions modeling tools, OFFROAD2021 ORION and the EMFAC2014. Without the annual burn areas defined and using the currently planned burn unit area it is estimated that the project will produce 139,682 tons of CO_2 from treatment activities and 1,852 tons of CO_2 from motorized exhaust for a total of 141,534 tons of CO_2 for the 10-year life of the project.			
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
CAL FIRE is committed to reducing GHG emissions during prescribed burn. The prescribed burn will result in a mosaic burn, resulting in an area burned less than the total treatment area acreage. CAL FIRE will ensure that prescribed burning stays within the burn specifications in the burn plan.			

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	☒
Energy will be consumed in the form of fossil fuel combustion in various on-road and off-road vehicles, heavy-duty equipment, hand-operated power tools, and helicopters. The use of fossil fuels for equipment and vehicles were examined in the PEIR. The treatment activities associated with equipment and duration of proposed use are consistent with those analyzed in the PEIR. The inclusion of land in the project aera that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing energy consumption is essentially the same within and outside the treatable landscape. Thus, the energy impact is also the same, and the consumption of energy during project implementation is within the scope of the PEIR. No SPRs are applicable to this impact.						
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	☒
Project treatment activities require the transportation, use, and storage of petroleum products (fuels, oils, and lubricants) which are known hazardous materials and could cause significant health hazards to humans and the environment. CAL FIRE will apply SPR-HAZ 1 to minimize leaks and the risk of resultant contaminants from entering the environment. CAL FIRE requires daily safety inspections and a regular maintenance plan for all equipment to ensure that equipment is safe, functional, and free of leaks. Spill kits are kept with vehicles and equipment to contain fuel and/or hydraulic leaks should they occur. Locations used for fueling the helicopter or servicing fire ignition systems are established in areas where spills can be easily and rapidly contained (i.e. level ground) that are also outside of Watercourse and Lake Protection Zones and other sensitive areas. Most fueling activities for the project will occur offsite at CAL FIRE stations. The types of treatment, including equipment and the use of hazardous materials, are consistent with the analysis in the PEIR and expected to be less than significant.						
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	☒
Herbicide application is not a treatment proposed 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	LTS	MM HAZ- 3	No	N/A	☒
No hazardous materials exist in the treatment units. This impact does not apply to the project.						
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 During	CAL FIRE
CAL FIRE requires daily safety inspections and a regular maintenance plan for all equipment to ensure that equipment is safe, functional, and free of leaks. Spill kits are kept with vehicles and equipment to contain fuel and/or hydraulic leaks should they occur. Locations used for fueling the helicopter or servicing fire ignition systems are established in areas where spills can be easily and rapidly contained (i.e. level ground) that are also outside of Watercourse and Lake Protection Zones and other sensitive areas.			
SPR HAZ-2 Require Spark Arrestors: This SPR applies only to manual treatment activities and all treatment types	Yes	CAL FIRE During	CAL FIRE
Manual treatment activities utilize chainsaws, and a functional spark arrestor is required for all chainsaws used by trained CAL FIRE employees.			
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
All engines and hand crews carry hand tools and fire extinguishers or back pumps.			
SPR HAZ-4 Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
All operations personnel will be instructed to refrain from smoking 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	
Herbicide application is not a treatment proposed 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	
Herbicide application is not a treatment proposed 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	

Herbicide application is not a treatment proposed 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	
Herbicide application is not a treatment proposed 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	
Herbicide application is not a treatment proposed 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.	No	CAL FIRE N/A	
No known hazardous waste sites exist in the treatment units.			

EC-10: HYDROLOGY AND WATER QUALITY

The project area is located in the Eel River watershed and encompasses drainages that flow into the Main Stem Eel River. Treatment units on the western side of the project area include drainages that flow toward the South Fork Eel River. The project area includes or drains into Long Valley Creek, Alder Creek, Burger Creek, and Outlet Creek.

Hydrological and water quality impacts evaluate compliance with water quality standards or waste discharge requirements. SPR HYD-1 – compliance with water quality regulations – is included in all impacts below. The State Water Resources Control Board requires all projects using the CalVTP PEIR to follow the requirements of their Vegetation Treatment General Order, which would meet the requirements of SPR HYD-1. If the project proponent finds that the proposed project is "within the scope" of the CalVTP PEIR, the State Water Board automatically enrolls the project into the Vegetation Treatment General Order using project information provided by the Board of Forestry. The project proponent is required to implement all applicable SPRs and MMs from the PEIR.

	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	☒
Prescribed burning will produce ash and debris from treatment areas that could result in runoff into adjacent drainages and streams. Although annual burn areas will be chosen to avoid streams and watercourses, pursuant to SPR HYD-4, watercourse and lake protection zones (WLPZs) ranging from 50 to 150 feet will be implemented for Class I and II streams that are within treatment areas. *Many water features were identified during the late season biological reconnaissance survey. In addition, a pre-treatment walk-through of burn area will be needed by a qualified RPF to identify unstable areas, equipment exclusion zones (EEZs), equipment limitation zones (ELZs), and any additional measures to protect water quality. All watercourses and wet areas with the potential to be impacted by treatment activities will receive standard protection measures per SPR HYD-4 for ignitions and control line construction with heavy equipment (EEZ & ELZs). Fire ignitions shall occur outside watercourse and lake protection zones but may be allowed to back into these areas. Prescribed burning will be managed to stay within the treatment units to create a mosaic of habitat ranging from low to moderate burn intensities such that islands of unburned habitat will provide adequate ground cover for water filtration during precipitation events. Hence, high overland water flow and nutrient loss of soil will be avoided, and vegetation type conversion will not occur.* *The prescribed burning specifications and control line preparation activities associated with this project are within the scope of the activities and impacts considered in the PEIR.*						
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	Impact HYD-2, 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	☒
Mechanical and manual treatments have the potential to disturb soil and result in runoff to streams and waterways, violating water quality standards and waste discharge requirements. The maintenance of existing ranch roads, and the preparation of control lines would expose the soil surface and could facilitate erosion. *As discussed above, the proposed project will incorporate the WLPZ protections of SPR HYD-4 and erosion control treatments of Impact GEO-1, and SPR GEO-1 by mechanical activities. Based on current surveys and analysis of the existing treatment areas, no features were identified. However, due to the longevity of the project, as new areas are identified for treatment follow-up surveys will be completed to ensure sure site conditions have not changed. A qualified RPF or biologist shall conduct a pre-treatment walk-through of the burn area to map and identify sensitive habitats such as wetlands, wet meadows, riparian areas, or areas prone to erosion caused by hydrological runoff with the potential to be impacted RPF, qualified biologist, or their designee will implement suitable avoidance buffers per SPR HYD-4 more thoroughly. The 2022 late season biological survey identified and mapped observations of wet areas and stream crossings for avoidance.*						

Ground disturbance will be limited during precipitation, and heavy equipment will not operate over saturated soils (SPR GEO-1 & -2). Equipment operation will be limited on steep or unstable slopes (SPR GEO-7 and SPR GEO-8). Treatment areas will be inspected for erosion and remediated prior to the rainy season and following the first large rainfall event (SPR GEO-4). *The potential for mechanical and manual treatment to cause runoff and violate water quality standards or waste discharge requirements was examined in the PEIR. This impact is within the scope of the PEIR because the use of heavy equipment and hand-held tools to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR.*						
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	☒
Prescribed herbivory is not included in this project. This impact does not apply.						
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	☒
Herbicide application is not a treatment proposed 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	☒
Prescribed burning, and mechanical and manual vegetation removal for this project will have minor effects on site drainage. Control line preparation will require heavy equipment or hand crews. Water breaks will be installed and maintained on roads and skid trails, used for firing operations, and establishing control lines, to minimize soil loss utilizing the spacing and erosion control guidelines set forth in SPR HYD-4 and Impact GEO-1. This will ensure watercourses are hydrologically disconnected from sediment runoff. Existing drainage systems will be avoided and maintained at pre-treatment drainage conditions (SPR HYD-6). Many water features were identified during the biological survey, and a qualified RPF, qualified biologist, or their designee will walk through individual burn areas, prior to treatment activities, to identify and map unstable drainage infrastructure. *The potential for prescription activities to alter existing drainage patterns of the treatment areas was examined in the PEIR. The types of treatments and treatment intensity are consistent with those analyzed in the PEIR.*						
Other Impacts to Hydrology and Water Quality: Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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	CAL FIRE
Jim Burke, Senior Engineering Geologist with North Coast Regional Water Quality Control board, was asked to review and comment on this project to address any water quality concerns in a letter dated April 14, 2023. No response was received as of August 4, 2023.			
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 Prior	CAL FIRE
The project will only maintain existing roads. Control lines may be established using heavy equipment or hand crews according to the limitations specified above and in the burn plan.			
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	
Prescribed herbivory is not a treatment proposed for this project.			
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
Prior to treatment activities, a qualified RPF or their designee will identify watercourses within treatment units. All watercourses and wet areas will receive standard protection measures per SPR HYD-4 for ignitions and control line construction with heavy equipment (Equipment Limitation Zone). Exceptions apply to the use of the existing road system, watercourse crossings where vehicle tracks remain dry, and watercourse buffers where handline may need to be constructed to protect sensitive resources. The project will not substantially divert or alter the bed, bank, or channel of any river, stream, or lake, or use material from a river, stream, or lake.			
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	
Herbicide application is not a treatment proposed for this project.			
SPR HYD-6 Protect Existing Drainage Systems: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE

If establishment of control lines is adjacent to a roadway with stormwater drainage infrastructure, the project proponent will mark that infrastructure prior to ground disturbing activities. On the off chance a drainage structure is disturbed or modified during treatment activity, CAL FIRE will coordinate with the owner of the system or feature to restore it to pre-project drainage conditions.

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	No	N/A	☒
The treatment type and activities proposed will occur on private property where broadcast burning has been historically conducted to maintain rangeland, promote restoration of native vegetation, and create a more fire-resilient landscape. These treatment types are consistent with land use and regulation and do not conflict with any land use plan, policy, or regulation. Any applicable county land use plan, policy, or regulation will be adhered to. The proposed project is consistent with the CAL FIRE Mendocino Unit 2023 Fire Plan. *This impact is within the scope of the PEIR because the treatment types and activities are consistent with those analyzed in the PEIR.*						
Impact LU-2: Induce Substantial Unplanned Population Growth	Impact LU-2, 3.12	LTS	N/A	No	N/A	☒
The treatment types and activities associated with this project will be conducted by local, existing CAL FIRE staff and from the Mendocino Unit. Project activities will occur on a limited number of days within the year during the daytime hours with CAL FIRE staff returning home at the end of each workday. The project is unlikely to result in additional demand for employees and therefore, is unlikely to induce substantial unplanned population growth. *The activities of this project are consistent with the scope of impacts evaluated in the PEIR.*						
Other Impacts related to Land Use and Planning, Population and Housing: Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?				No	N/A	☒

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	☒
Treatment activities have the potential for a short-term increase in exterior ambient noise. Prescribed burning and mechanical and manual treatment require the use of noise-intensive vehicles and equipment (i.e., fire engines, bulldozers, masticators, and chainsaws). These treatment activities will be limited to 3-10 days per year and will occur Monday through Friday, 0800-1700 hrs on rural private property away from sensitive receptors. Ambient noise will return to pre-project levels once the annual project activities are completed. *Treatment activities associated with this project are consistent with and within the scope of noise impacts evaluated in the PEIR.*						
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	Impact NOI-2, 3.13	LTS	SPR NOI- 1	Yes	LTS	☒
Treatment activities associated with prescribed burning and mechanical and manual treatment will require the use of trucks such as fire engines and heavy equipment transports, resulting in a short-term increase in truck-generated single event noise level (SENL) exposure along travel routes to and from the project. Exposure to short-term increase in truck generated SENLs would occur Monday through Friday, 0800-1700 hrs on Highway 101 where various industrial activities and hauling occur on a daily basis. Treatment activities will be limited to 3-10 days per year. *Treatment activities associated with this project are consistent with and within the scope of noise impacts evaluated in the PEIR.*						
Other Impacts Related to Noise: Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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
Treatment activities will be limited to 3-10 days per year and will occur during regular business hours, 0800-1700 hrs, Monday through Friday. Any additional measures, if feasible, will be considered to reduce exposure of sensitive receptors to noise.			
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 During	CAL FIRE
All CAL FIRE vehicles and equipment are regularly maintained on a schedule and checked daily to ensure that all equipment is safe and compliant with all local, state, and federal laws governing noise and emissions.			
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
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
The proposed project is located on two private properties that are primarily used for ranching and rural recreation. All staging areas will be discussed with the ranch manager of Shamrock Ranch and landowner of Eriksen Ranch and will be placed away from residences or other noise sensitive receptors.			
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
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.	No	CAL FIRE N/A	
The proposed project is located on 18,233 acres of private land that is primarily used for ranching and private rural recreation. All treatment areas are over 1,500 feet away from any off-site noise-sensitive receptors.			

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	Yes	LTS	☒
The proposed project is located on two privately-owned ranches used primarily for ranching and rural recreation. The landowners of the respective ranches regulate all recreational activities and are not within the public domain. The privately-owned ranches participate in the Private Land Management Program that allow for the taking of Tule Elk and blacktail deer. *The potential for vegetation treatment activities to disrupt recreation activities was examined in the PEIR.*						
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.	Yes	CAL FIRE Prior	CAL FIRE
With sufficient lead time, Cal Fire will communicate with the owner/manager of each ranch on scheduling treatment activities such that private recreational use will not conflict.			

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, 4, 6	Yes	LTS	☒
Pre-project and treatment activities will cause temporary increases in traffic along Highway 101 leading to the project area when operations are scheduled. The temporary increase in traffic will not conflict with any program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures and was examined in the PEIR. SPR TRAN-1 would implement traffic control during treatments. SPR AD-3 and AD-6 would require public notification of treatments. *Potential impacts to the transportation system as a result of this project are within the scope of the impacts evaluated and addressed in the PEIR.*						
Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, 3.15	LTS	SPR TRAN- 1 SPR AD-3	Yes	LTS	☒
Treatment activities do not require the alteration of roadways or expose vehicles to hazardous road conditions as a result of road design. Prescribed burning would produce smoke and could potentially affect visibility along nearby public roads such that a transportation hazard could occur. SPR TRAN-1 requires the project proponent to monitor prescribed burning operations and the associated smoke dispersion, and to implement traffic control during treatments. Any impact or change in smoke dispersal patterns will adhere to the Smoke Management Plan and the local air quality management district recommendations to ensure public safety and reduce exposure of sensitive receptors. *Project activities related to or affecting the transportation system were evaluated and are within the scope of impacts addressed in the PEIR.*						
Impact TRAN-3: Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, 3.15	PSU	MM AQ- 1 SPR AD- 4, 6	Yes	LTSM	☒
The commute of personnel and resources to and from the proposed project would result in a net increase in Vehicle Miles Traveled (VMT) in comparison to existing conditions for the duration of treatment activities. SPRs AD-4 and AD-6 would require public notification of treatment, thus providing local commuters or others that could be affected by the increase in traffic the opportunity to change their schedule during treatment activities. *This impact was identified as potentially significant and unavoidable in the PEIR and is within the scope of impacts addressed in the PEIR.*						
Other Impacts to Transportation: Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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.	No	CAL FIRE N/A	
The entrance to the project area from State Highway 101 has good visibility and sufficient road lanes thereby avoiding the need to implement traffic control measures to ensure motorist and worker safety. Unit 2 borders State Highway 101, but there is no ingress/egress from public roads.			

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	☒
Prescribed burning will require a sufficient water supply to control the fire. All water will be transported to the project area during treatment activities by fire engines and water trucks, which will be filled offsite daily prior to each workday. Prescribed broadcast burning is expected to burn with a low-to-moderate intensity and be under a high degree of control. This aspect of the project should avoid the need to utilize onsite water sources. However, additional water sources are available in lakes, ponds, and small reservoirs within the project area if needed for suppression activities on an emergency basis. Utilization of water is not expected to have any physical impact on, or infrastructure needs related to water supplies. *The proposed treatment activities associated with this project are within the scope of impacts evaluated in the PEIR.*						
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	PSU	SPR UTIL- 1	No	N/A	☒
Prescribed broadcast burning and a very small amount of pile burning will not generate excess solid waste. Mechanical treatments that result in the generation of biomass waste are not proposed. There is no risk of exceeding state standards or waste infrastructure capacity. *The proposed treatment activities associated with this project are within the scope of impacts evaluated in the PEIR.*						

Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	Impact UTL-3, 3.16	LTS	SPR UTIL- 1	Yes	LTS	☒
The project does not propose to generate and/or ship solid waste such as woody biomass to a waste facility. All vegetative materials and burn waste associated with the project will be maintained on site. *The proposed treatment activities associated with this project are within the scope of impacts evaluated in the PEIR.*						
Other Impacts to Public Services, Utilities, and Service Systems: Would the project result in other impacts to public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	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	
There is no plan to dispose of materials outside of the treatment area.			

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	☒
The proposed vegetation treatment will involve prescribed burning, and mechanical and manual treatments. Motorized equipment use could pose a risk of accidental ignition. Temporary increases in risk associated with uncontrolled fire from prescribed burns could also occur. Under "Prescribed Burn Planning and Implementation" of Section 3.17.1, "Environmental Setting," in Volume II of the PEIR, implementing a prescribed burn requires extensive planning, including the preparation of prescription burn plans, smoke management plans, site-specific weather forecasting, public notifications, safety considerations, and ultimately favorable weather conditions so a burn can occur on a given day. Prior to implementing a broadcast burn, fire control lines would be established by clearing vegetation surrounding the designated burn area to prevent the accidental escape of fire. Water trucks and safety equipment would be staged onsite as necessary. *The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR. Increased wildfire risk associated with the use of motorized equipment in vegetated areas and with prescribed burns is within the scope of the PEIR because the types of equipment and treatment duration and the types of prescribed burn methods proposed as part of the project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are AD-3, AQ-3, HAZ-2, HAZ-3, and HAZ-4.*						
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	No	N/A	☒
The project is unlikely to expose people or structures to substantial risks related to post-fire flooding or landslides because the properties where the prescribed burn treatment is proposed are ranches and forestland largely devoid of people and homes. Treatment units are sufficiently buffered by untreated, woodland and grassland areas. Post-burn and prior to the wet season, water breaks will be installed along exposed road surfaces and ensure existing drainage facilities are functional and adequate to handle runoff during storm events. Additionally, pursuant to SPR GEO-4, an inspection for proper implementation of erosion control measures will occur post-treatment and prior to the first rainfall event. *The proposed treatment activities associated with this project are within the scope of impacts evaluated in the PEIR.*						
Other Impacts related to Wildfire: Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?				No	N/A	☒

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	CAL FIRE
CAL FIRE is the project proponent, working in conjunction with the landowners to meet their objectives of ecological restoration.			
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
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	CAL FIRE
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	Yes	CAL FIRE Prior	CAL FIRE

the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types.			
Prescribed burning activities shall be properly noticed at least three days in advance by: *1) Contacting the management personnel for the property where the project is located;* *2) Submitting a press release to the public via local radio stations;* *3) Notifying the Mendocino County Board of Supervisors and its administrative officer.*			
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 are not necessary for this project. All debris and refuse generated by the operations team shall be properly disposed of daily. Flagging or other markers used to identify protected areas shall be removed after all project activities have been fully completed within a treatment unit for the life of the project.			
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	CAL FIRE
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
The project was posted on the Board's CalVTP Proposed Projects viewer on May 18, 2023.			
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

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	
The project is located outside the Coastal Zone.			

References

Brylski, P., and J. Harris. 1990. Sonoma Tree Vole (*Arborimus pomo*). California Wildlife Habitat Relationship System, California Department of Fish and Wildlife, California Interagency Wildlife Task Group.

CAL FIRE. Fuel Reductions Projects. Treatment: 2020 Shamrock VMP. https://www.fire.ca.gov/what-we-do/natural-resource-management/fuels-reduction Accessed March 13, 2023.

California Air Resources Board. 2017 OFFROAD2017-ORION. https://arb.ca.gov/emfac/emissions-inventory Accessed March 15, 2023.

California Department of Conservation (CDC). Landslide Inventory (Beta). https://maps.conservation.ca.gov/cgs/lsi/ Accessed February 1, 2023.

California Native Plant Society (CNPS). 2023. Inventory of Rare and Endangered Plants of California (online edition, Version V-9.5). https://rareplants.cnps.org/ Accessed April 20, 2023.

California Natural Diversity Database (CNDDB). 2023. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed February 6, 2023.

California Department of Transportation (Caltrans). October 2021. Caltrans Bat Mitigation: A guide to Developing Feasible and Effective Solutions. Prepared by H. T. Harvey & Associates, Sacramento, CA.

DiTomaso, J.M. and D.W. Johnson (eds.). 2006*. The Use of Fire as a Tool for Controlling Invasive Plants*. Cal-IPC Publication 2006-01. California Invasive Plant Council: Berkeley, CA. 56 pp.

DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States.* Weed Research and Information Center, University of California. 544 pp.

Fuller, M., et al. 2015. Coast Ranges Geomorphic Province, Geological Gems of California, GeoGem Note 3, Fuller, M., Brown, S., Wills, C. and Short, W., editors, California Geological Survey Special Report 230 under Interagency Agreement C01718011 with California State Parks.

Hatfield, R., S. Jepsen, S. Foltz Jordan, M. Blackburn, and A. Code. 2018. A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee (*Bombus crotchii*), Franklin's bumble bee (*Bombus franklini*), Suckley cuckoo bumble bee (*Bombus suckleyi*), and western

bumble bee (*Bombus occidentalis occidentalis*) as Endangered under the California Endangered Species Act. The Xerces Society for Invertebrate Conservation, Portland, OR, USA

Maser, C., B.R. Mate, J.F. Franklin, and C.T. Dyrness. 1981. Natural history of Oregon coast mammals. Pac. Northwest For. And Range Exp. Sta., USDA, For. Serv., Gen Tech. Rep., PNW-133. 496pp.

Schelenz, R. 2022. *How the Indigenous practice of 'good fire' can help our forests thrive.* University of California. https://www.universityofcalifornia.edu/news/how-indigenous-practice-good-fire-can-help-our-forests-thrive Accessed April 24, 2023.

Stephens, S. L., Kane, J. M., & Stuart, J. D. 2018. North Coast Bioregion. In S. L. Stephens, J. W. Van Wagtendonk, N. G. Sugihara, A. E. Thode, K. E. Shaffer, & J. A. Fites-Kaufman (Eds.), Fire in California's Ecosystems (2nd ed., pp. 149–170). University of California Press.

Thomson, Robert & Wright, Amber & Shaffer, H. 2016. California Amphibian and Reptile Species of Special Concern. CDFW and UC Press.

U.S. Fish and Wildlife Service (USFWS-a) Information for Planning and Consultation electronic records search. https://ecos.fws.gov/ipac/. Accessed February 14, 2023.

U.S. Fish and Wildlife Service (USFWS-b). National Wetlands Inventory – Version 2, Surface Waters and Wetlands Inventory. ArcGIS Online. Accessed March 23, 2023.

U.S. Fish and Wildlife Service (USFWS-c). 2023. Western Monarch Butterfly Conservation Recommendations. 7 p. https://xerces.org/publications/planning-management/western-monarch-butterfly-conservation-recommendations Accessed April 12, 2023.

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). (See Attachment A)

☒ Vicinity map on a USGS quad map (SPR AD-2)

- ☒ Aerial imagery of subsequent activity area (see vicinity and location maps)
- ☐ 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 Pan/Burn Plan (SPR AQ-2 & 3) – **SMP will be submitted/approved prior to burning**

- ☐ Public Notice for Prescribed Burning - **will be posted prior to 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 (SPR AQ-5)

☐ Incident Action Plan (IAP) (SPR AQ-6) – **will be submitted with completion report**

☒ Archaeological reviews/surveys (Confidential addendum) (EC-4)

☒ Biological review/surveys (EC-5)

- ☐ CNDDB Records Search
- ☒ Biologist Consultation/Notification
- ☒ Water Quality consultation
- ☒ Consult Attachment C (and Cal VTP Appendix BIO-3)

☐ Biological Compensation Plan (MM BIO-1c, 2c, 2d, 2e, 2f, 3b, 3c,)

☐ Geological Review (MM GHG-2)

☐ Spill Prevention & Response Plan (SPR HAZ-5)

☐ Traffic Management Plan (SPR TRAN-1)

☐ Organic waste Disposal Plan (SPR UTIL-1)

☒ Air Quality and GHG Emissions Estimates (SPR GHG-1)

- ☐ Air Quality consultations - **SMP will be submitted/approved prior to burning**

☐ Off-Site Noise-Sensitive Receptors Notification (SPR NOI-6)

☐ Other _____

DELIVERABLES POST APPROVAL

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