THE CALIFORNIA VEGETATION TREATMENT PROGRAM ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1.	**Project Title:**	*Santa Rosalia VTP (Rx-North-056-CZU)*
2.	**CAL FIRE Project Number**	*Rx-North-056-CZU*
3.	**CalVTP I.D. Number**	*2021-10*
4.	**Project Proponent Name and Address:**	*CAL FIRE San Mateo Santa Cruz Unit* *6059 Highway 9* *Felton, CA 95018*
5.	**Contact Person Information and Phone Number:**	*CZU VMP Coordinator Andrew Hubbs –* Andrew.Hubbs@fire.ca.gov *(831)335-6794*
6.	**Project Location:**	• *Santa Cruz County* • *The project is located approximately 11 miles northeast of the city of Santa Cruz. Unsurveyed Rancho Shoquel Augmentation, Sections 14, 15, 22, 23, 26, 27, T10S, R1E, MDBM. Loma Prieta and Laurel Quads.* • *See vicinity map*
7.	**Total Area to be Treated (acres)**	1,162

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 project is located in east central Santa Cruz County at an approximate elevation range of 800 – 2,600 feet in the Santa Cruz Mountains. Vegetation is highly variable given the broad elevational range, aspects, slope positioning, and soil type/depth in the project area. Redwood/mixed evergreen forest tend to be prolific in drainages, north aspects and moister slopes and ridges. Hardwood stands are most numerous on drier ridgetop locations; chaparral occupies drier ridges and south/west aspects with poorer and/or drier soils. A small stand of eucalyptus occurs in the extreme southwest portion of the project area on Hinckley Ridge.

Comprised of several ownerships, this project includes Forest of Nisene Marks State Park, Soquel Demonstration State Forest (SDSF) and a few privately-owned parcels. It primarily spans prominent ridges in and around the Nisene Marks State Park area as well as a primary access route into the State Forest. These locations will be strategic for future fire suppression activities. Fire history demonstrates this area is prone to large fire growth. Numerous large fires have originated in Santa Clara County and burned into or toward Santa Cruz County near this location within the last 30 years. The 2019 45-day report, generated by CAL FIRE at the direction of

Governor Newson, identified much of this project's location as one of 35 high priority projects around the state. Completed in late 2019, the Aptos/Buzzard/Hinckley fuel reduction project treated approximately 261 acres. The current project is intended to maintain the 2019 efforts and expand the width of this fuel break where feasible, as well as adding additional areas of ridgetop and roadside fuel reduction.

This project will employ several treatment activities to achieve and maintain reduced fuel loading/fuel arrangement. The treatments will be based on factors such as vegetation type, previous fuel management, slope/accessibility, landowner objectives, funding and biomass utilization capabilities. Overall, the treatments seek to reduce surface and ladder fuels in forested areas, creating shaded fuel breaks and areas of reduced fuels beneath canopies. In chaparral dominated areas, treatments will break up continuous expanses of brush, generally in a mosaic fashion with approximately 1/3 retention of individual and clumps of shrubs. Project work may occur nearly year-round with limitations associated with biological restrictions, burn prescriptions and access for vehicles and equipment during wet conditions; these and other restrictions are discussed in subsequent portions of this Project Specific Analysis (PSA).

Prescribed Burning

This treatment type will potentially occur in every vegetation type in the form of broadcast burning or pile burning. Broadcast burning will generally be limited to understory areas that have already received fuel treatment (understory mastication) and therefore mostly utilized as a tool to maintain shaded fuel breaks. Several burn units at SDSF and several small locations at Nisene Marks State Park, however, have not received prior treatment and will be understory-broadcast burned following minor manual and/or mechanical pretreatments. Understory broadcast burning may occur on up to approximately 300 acres, every five or more years for maintenance purposes.

Pile burning (hand and tractor) will occur both as a maintenance tool in previously treated areas and to dispose of treated vegetation in locations that have received no treatments. Burned vegetation will include cut understory fuels and chaparral. Pile burning may occur over most of the project area (estimated not more than 800 ac), excluding steep slopes, WLPZs and ELZs; every five or more years for maintenance purposes.

Manual Treatments

This treatment type consists of hand crews pruning lower limbs of larger "leave" trees, cutting small diameter trees (generally 10" or less) and brush, cutting dead and dying trees of any size, and in limited cases (300 acres of the project or less), the thinning of larger diameter trees (up to 24" DBH) in dense stands to minimize horizontal fuel continuity and favor the growth of larger adjacent trees. In chaparral stands, a mosaic approach to shrub removal will occur, leaving islands of intact vegetation spaced 50-100' apart. Up to 2/3s of chaparral could be removed. Cut material generated from manual treatments will mostly be piled for burning, chipped or lopped. Some of the cut material, including material too large to be processed by the aforementioned methods, may be transported to a biomass facility for utilization, taken by non-commercial firewood gathers or processed in a tub grinder or air curtain burner. Other than possible biomass utilization, no commercialization of material will

occur. This treatment may occur over the entire project area, not more frequently than five years in any one location for maintenance purposes.

Mechanical Treatments

This treatment type may involve the use of masticators and/or feller bunchers targeting the vegetation described in the Manual Treatments section above. Loaders and skidders maybe utilized to move material utilized as biomass or firewood to accessible areas for transport. Tracked and wheeled chippers, tub grinders and curtain burners may dispose of some cut material. Bull dozers will be utilized to crush vegetation in order to pretreat fuels for prescribed burning, make piles for burning and to construct control lines. All mechanized equipment will operate on slopes less than 35%, except during line construction where bull dozers may operate on slopes up to 50%. No equipment use will occur in WLPZs and ELZs. Refer to subsequent relevant portions of this PSA for more information on equipment use and restrictions. It is estimated that no more than 400 acres will be treated with this method and not more frequently than five years in any one area.

Herbicide

This treatment type will occur over a relatively small portion of the project area; used after fuel treatments primarily to control exotic invasive species such as eucalyptus, French broom, jubata grass and acacia. The reoccurrence of herbicide use to control exotics would be dependent on the amount of and how quickly infestations occurred.

To a lesser extent, herbicides could be used to control hardwood coppices in overly dense stands and brush coppices along immediate roadsides (within 10' of the road). If utilized at all, the use of herbicides to control coppice would occur only after another treatment occurred (manual or mechanical for example) and therefore would not occur more frequently than the return interval of those treatments.

It is estimated use of herbicides would occur over less than 50 acres of the project area and would occur under recommendations of a Licensed Pest Control Advisor. Refer to subsequent relevant portions of this PSA for more information on herbicide use and restrictions.

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, 300 acres
- ☒ Prescribed (Pile) Burning, 800 acres
- ☒ Mechanical Treatment, 400 acres
- ☒ Manual Treatment, 1,162 acres

☐ Prescribed Herbivory, _____ acres

☒ Herbicide Application, 50 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

The treatable landscape map indicates portions of the project are not in the treatable landscape. This map shows that the fuel break treatment area is disjunct over the project area, largely following portions of the prominent ridges typical of fuel break treatments, but forming non-continuous areas along the ridges. It is likely that the scattered array of treatable vs. non-treatable landscape along the ridges is due to mapping error given the large geographic scale of the state-wide mapping effort.

On-site observation confirms there are no changes in vegetation type, composition and structure nor changes in fuel load/conditions relative to the adjacent areas of treatable landscape. Additionally, the project is entirely within the SRA and there are no unusual/unique habitats or land uses such as estuaries, marshes, vineyards or quarries. Because the areas of the proposed project that are mapped outside of the treatable landscape have the same conditions as the areas mapped within the treatable landscape, the environmental analysis in the PEIR is applicable.

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

This project is located in east central Santa Cruz County at an approximate elevation range of 800 – 2,600 feet in the Santa Cruz Mountains. Comprised of several ownerships, this project includes Forest of Nisene Marks State Park, Soquel Demonstration State Forest and a few privately-owned parcels. It primarily spans prominent ridges in and around the Nisene Marks State Park area as well as a primary access route into the State Forest. Land uses are primarily recreation and timber production.

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

No other public agencies approval is required for this project. During the development of the project The California Department of Fish and Wildlife and the central Coast Regional Water Quality Control Board was consulted and provided input. Monterey Bay Unified Air Pollution Control District 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.

CAL FIRE Associate State Archaeologist, Ben Harris was consulted during the planning phase of the proposed project. A records search, tribal notification, survey and survey report were conducted for the VTP area. Prehistoric and historic sites are present in the project area; refer to the attached Archaeological Survey Report for more information.

If previously undocumented cultural resources are encountered during the project activities (including but not limited to dark soil containing shell fragments, bone, flaked stone, ground stone, or deposits of historic trash), work within the immediate vicinity of the find will stop until a CAL FIRE cultural resource specialist has evaluated the find and implemented appropriate mitigation measures. Furthermore, should project activities expose human bone/remains, operations will cease and the Santa Cruz County Coroner's Office and a CAL FIRE archaeologist must be contacted within 24 hours of discovery. All work will remain halted until clearance is granted.

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 landowner 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 landowner 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: John Melvin 6369EF663A04422... Date: 12/16/2021

Printed Name: John Melvin Title: Assistant Deputy Director

CALIFORNIA DEPARTMENT OF
FORESTRY AND FIRE PROTECTION
CAL FIRE

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

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

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

6. Standard Project Requirements (SPR) and Mitigations Measures (MM).
    - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
    - **Implementing Entity**. Most cases this will be CAL FIRE. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., 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	☒
Much of the project area is open and accessible to the public. The project site is generally visible from afar (several miles) or immediately on-site due to vegetative and topographic conditions. Vegetation treatment activities would include manual treatments, prescribed burning (broadcast burning and pile burning), mechanical treatments and herbicide treatments. Potential short-term impacts to visual character during implementation of these treatments in the project are within the scope of the 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	☒
Most of the project will result in a shaded fuel break condition following treatment. Though the vast majority of the project is forested, several pockets of chaparral are present. Because a shaded fuel break is not possible in this vegetation type, a mosaic approach to shrub retention will occur and is discussed in Impact AES-3. Potential for the Shaded Fuel Break Treatment Type to result in long-term degradation of the visual character of an area are within the scope of the of the activities and impacts addressed 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 Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	Impact AES-3, 3.2	SU	MM AES- 3	No	N/A	☒
Mosaic retention of shrubs will occur within treatments of non-forested areas, but no Non-Shaded Fuel Break Treatment Types are proposed for this project because approximately 1/3 of the shrubs will be retained in the form of single specimens or clumps. The PEIR defines Non-Shaded Fuel Breaks as removal of all vegetation.						
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
PRIOR – Pre-field work to determine treatment boundaries will take into consideration topographical features and specifically retain individual or groups of vegetation for retention with the intent to create irregular vegetation densities. *DURING – Resources performing the treatment work will stay within the established boundaries and leave vegetation designated for retention.*			
SPR AES-2 Avoid Staging within Viewsheds: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
The project area is mostly located on public property with trails, recreational areas and one public roadway present. Staging will occur outside the viewshed of these areas when feasible.			
SPR AES-3 Provide Vegetation Screening: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
Most of the trails and roads where the project is visible are located in the treatment area. Trails and roads in the treatment area will have suitable vegetation left intact for minor screening, but mostly the retained vegetation will give a natural and park-like appearance. The intact vegetation will include overstory trees, young trees/shrubs that are not ladder fuels in forested areas and individual and clumps of shrubs in chaparral areas.			
MM AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks	No	N/A	N/A
The project is not proposing to create Non-Shaded Fuel Breaks – refer to Impact AES-3.			

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	No	N/A	☒

The project will generally remove understory trees. As discussed in the project description, trees up to 24" may be removed to disrupt horizontal fuel continuity and increase growth of adjacent trees, but a forested area will remain in all areas where it currently exists. The removal of any overstory trees would occur only in overly dense stands and would be limited to codominant and intermediate trees. No forest conversion or change in land use will occur as a result of the project.						
Other Impacts to Agriculture and Forest Resources: Would the project result in other impacts to agriculture and forest resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

EC-3: AIR QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	Impact AQ-1, 3.4	PSU	SPR AD- 4 SPR AQ- 2- 6 MM AQ- 1	Yes	LTSM	☒
Use of vehicles, mechanical equipment, and burning activities during treatments would result in emissions of criteria pollutants that could exceed CAAQS or NAAQS thresholds. Emissions of criteria air pollutants related to the proposed treatment are within the scope of the impacts addressed in the PEIR because the proposed activities, as well as the associated equipment and duration of use, are consistent with those analyzed in the PEIR. The components of mitigation measure AQ-1 that have been determined by CAL FIRE to be feasible, and would be implemented to reduce emissions include use of some gasoline-powered equipment and encouraging carpooling to the project site. Equipment meeting Tier 4 emission standards, Best Available Control Technology for emission reductions of NO_X and PM on equipment and the use of renewable fuel would be implemented to the extent feasible.						
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	Impact AQ-2, 3.4	LTS	SPR HAZ- 1 SPR NOI- 4, 5	Yes	LTS	☒
Use of vehicles and mechanical equipment during initial and maintenance treatments could expose people to diesel particulate matter emissions. Diesel particulate matter emissions from the proposed treatment project are within the scope of the of the activities and impacts addressed in the PEIR because the burn duration and exposure parameters of the proposed project are consistent with those analyzed in the PEIR.						

Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	Impact AQ-3, 3.4	LTS	SPR AQ-4, 5	No	N/A	☒
This impact does not apply to the treatment project, because no naturally occurring asbestos is mapped in the treatment area						
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, 4, 6	Yes	PSU	☒
Prescribed burning during treatments could expose people to toxic air contaminants. The duration and parameters of the prescribed burn are within the scope of the activities addressed in the PEIR; therefore, the potential for exposure to toxic air contaminants is also within the scope of impacts covered in the PEIR. All feasible measures to prevent and minimize smoke emissions as well as exposure to smoke are included in SPRs. No additional mitigation measures are feasible, and this impact would remain potentially significant and unavoidable, as explained in the PEIR.						
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	Impact AQ-5, 3.4	LTS	SPR HAZ- 1 SPR NOI-4, 5	No	N/A	☒
Trails and roads accessible to the public will be temporarily closed during periods of work involving diesel equipment for safety purposes. Otherwise, due to the distance between the project area and sensitive receptors, use of vehicles and mechanical equipment during treatments will not expose people to objectionable odors from diesel exhaust.						
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, 4, 6	Yes	PSU	☒
Prescribed burning during treatments could expose people to objectionable odors. The duration and parameters of the prescribed burn are within the scope of the activities addressed in the PEIR; therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. All feasible measures to prevent and minimize smoke odors as well as exposure to smoke odors are included in SPRs. No additional mitigation measures are feasible, and this impact would remain potentially significant and unavoidable, as explained in the PEIR.						
Other Impacts to Air Quality: Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AQ-1 Comply with Air Quality Regulations: This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE
CAL FIRE policy requires all vegetation management program treatments utilizing prescribed fire to comply with Air Quality Regulations for their air district. A Smoke Management Plan will be submitted and permit will be acquired from the Monterey Bay Air Resources District prior to burning activities.			
SPR AQ-2 Submit Smoke Management Plan: This SPR applies only to prescribed burning treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE
CAL FIRE policy requires all vegetation management program treatments utilizing prescribed fire to comply with Air Quality Regulations for their air district. A Smoke Management Plan will be submitted and permit will be acquired from the Monterey Bay Air Resources District prior to burning activities.			
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types**.**	Yes	CAL FIRE Prior	CAL FIRE
A burn plan has been prepared and included.			
SPR AQ-4 Minimize Dust: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
All listed measures within SPR AQ-4 will be implemented to minimize dust during treatments (see Attachment-A List of Standard Project Requirements (SPRs) and Mitigations Measures (MMs)).			
SPR AQ-5 Avoid Naturally Occurring Asbestos: This SPR applies to all treatment activities and treatment types.	No	N/A	N/A
There are no naturally occurring asbestos mapped in the treatment area.			
SPR AQ-6: Prescribed Burn Safety Procedures: Prescribed burns will follow all safety procedures required of CAL FIRE crews, including the implementation of an approved Incident Action Plan (IAP).	Yes	CAL FIRE Prior-During	CAL FIRE
This project has been planned and will be managed by CAL FIRE. CAL FIRE will be conducting all burning and will follow all policy and safety procedures required for conducting burning by CAL FIRE. An IAP will be created for broadcast burning. There has been a burn plan created which identifies the specific burn prescription; weather limitations and monitoring; posting notifications; and other special instructions. Prior to ignition, crews will be given an onsite briefing which will include a safety briefing, specific burn instructions, weather limitations, communication plan, medical plan, and other special instructions.			
MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques	Yes	CAL FIRE Prior-During	CAL FIRE

Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.			
The components of mitigation measure AQ-1 that have been determined by CAL FIRE to be feasible and would be implemented to reduce emissions include use of gasoline-powered equipment and encouraging carpooling to the project site. Equipment meeting Tier 4 emission standards, Best Available Control Technology for emission reductions of NO_X and PM on equipment and the use of renewable fuel would be implemented to the extent feasible.			

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	Impact CUL-1, 3.5	LTS	SPR CUL-1, 7, 8	Yes	LTS	☒
Built historic resources are present in the project area. Project activities that have the potential to impact these resources will not occur; specific protection measures for sites 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	PS	SPR CUL-2, 3, 4, 5, 8 MM CUL- 2	Yes	LTSM	☒
Cultural resources are located in the project area. The sites will be avoided from project activities; specific avoidance measures for sites are listed in a confidential Archeological Survey Report. Additionally, vegetation treatment could include mechanical treatments using heaving equipment. The potential for these treatment activities to result in inadvertent discovery of unique archaeological resources or subsurface historical resources was examined in the PEIR. Treatment activities and extent of ground disturbance of the treatment project are consistent with those analyzed in the PEIR and Mitigation Measure CUL-2 would apply to this treatment.						
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	Impact CUL-3, 3.5	LTS	SPR CUL-1, 2, 3, 5, 6, 8	Yes	LTS	☒
Project treatments would include manual treatment, prescribed broadcast burning, prescribed pile burning, herbicide use and mechanical treatment. The potential for adverse effects to tribal cultural resources during implementation of the treatments is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and extent of ground disturbance are consistent with those analyzed in the PEIR. Native American contacts in Santa Cruz County were contacted on March 10 and April 12, 2021. No response was received from the contact.						

Impact CUL-4: Disturb Human Remains	Impact CUL-4, 3.5	LTS	N/A	Yes	LTS	☒
Vegetation treatment could include mechanical treatments using heavy equipment. The potential for uncovering human remains during implementation of the treatment project is within the scope of the activities and impacts addressed in the PEIR. Should human remains be discovered the project would comply with California Health and Safety Code Sections 7050.5 and 7052 and PRC Section 5097.						
Other Impacts to Archeological, Historical, and Tribal Cultural Resources: Would the project result in other impacts to archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR CUL-1 Conduct Record Search: For treatments led by CAL FIRE, an archaeological and historical resource record search will be conducted per the "Archaeological Review Procedures for CAL FIRE Projects" (current edition dated 2010). This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
An Archaeological Records Check Request for a CAL FIRE Project was completed by Andrew Hubbs and sent to the Northwest Information Center on March 29, 2019 for most of the project area; the remaining portion of the project received an ownership-wide search on June 4, 2019. Records Search results were received from the information center.			
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List, which may be obtained from the CAL FIRE website, as appropriate. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
Letters identifying the location, treatment types, purpose and proposed projection measures of known sites for the project where sent to the Native American contacts from the "California Department of Forestry and Fire Protection (CAL FIRE) Native American Contact list, revised July 1, 2020, Santa Cruz County" list. The letters also requested any information concerning the location of any cultural resources that may exist within the project area. *No response was received. Full archaeological survey and reporting has been completed for the project.*			
SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. This SPR applies to all treatment activities and treatment types	Yes	CAL FIRE Prior	CAL FIRE

Pre-field research included review of site records from the Information Center report, reference materials and conversations with the landowners.			
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
A Confidential Archaeological Survey Report was prepared by Andrew Hubbs and reviewed by Benjamin Harris (CAL FIRE Northern Region Associate State Archaeologist). Refer to the attached Confidential Archaeological Survey Report for the discussion on specific cultural resources and a list of potential effects and proposed protection measures.			
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, 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
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
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 historic resources will be protected from project activities.			
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	Yes	CAL FIRE During	CAL FIRE

a qualified professional archaeologist or CAL FIRE archeological trained Registered Professional Forester will assess the significance of the find.			

EC-5: BIOLOGICAL RESOURCES

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	Impact BIO-1, 3.6	PS	SPR BIO-1, 2, 7, 9 SPR AQ-3, 4, SPR GEO-1, 3, 4, 5, 7 SPR HYD-5 MM BIO-1a, 1b, 1c	Yes	LTSM	☒

Project treatments (prescribed broadcast burning, prescribed pile burning, manual treatment, mechanical treatment, herbicide use) could result in direct or indirect adverse effects to special-status plant species because suitable habitat for some species is present. The potential for adverse effects to special-status plants is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR.

On May 29th,June 2nd, and June 25th 2021, CAL FIRE Environmental Scientist Matthew Mosher conducted site visits to assess habitat for potential species identified during project scoping. Based on this site visit Matthew prepared a Habitat Analysis/Biological Scoping Table (End of EC-5). A number of special-status plant species were identified during project scoping. All but three of these species were determined to lack suitable habitat after reviewing their specific habitat requirements. The following three Rare Plant Rank List 1 species may have suitable habitat in the project area but, if present, will not be significantly impacted or will be avoided entirely:

Penstemon rattanii var. kleei (Santa Cruz Mountains beardtongue) – Occurs in the project area and is very abundant following the chaparral prescribed burn project implemented on Santa Rosalia Mountain in 2019. Originally only numbering a few plants, this occurrence is now robust and numbers in the hundreds. This species will be avoided by manual and mechanical treatment methods but may occur in burn units as it has been demonstrated that this species benefits dramatically from the re-introduction of fire.

Arctostaphylos andersonii (Anderson's manzanita) - Limited areas of chaparral occur in the project area. CNDDB Occurrence #50 occurs in the northeastern portion of the project area near Santa Rosalia Mountain. This species will be flagged and avoid by manual, mechanical,

and ground disturbing activities if found. It may be burned as this species is an obligate seeder which requires bare mineral soil and fire to germinate and is considered under threat by fire suppression (ESF 2021). *Malacothamnus arcuatus (arcuate bush-mallow) - Occurs in chaparral, cismontane woodland. Limited habitat occurs in the project area. This species will be flagged and avoid by manual, mechanical, and ground disturbing activities if found. It may be burned as this species is an obligate seeder which requires bare mineral soil and fire to germinate and is considered under threat by fire suppression (Neubauer 2013).* *Mitigation Measure BIO-1b, for prescribed burning, manual treatment, and mechanical treatment will be implemented. For prescribed burning, residual effects of the treatment would not be significant under CEQA with implementation of Mitigation Measure BIO-1b and relevant SPRs because implementation of the treatment would maintain habitat function of the special-status plant habitat and because the loss of a few individuals would not substantially reduce the number or restrict the range of the species. Additionally, the three special-status plant species with potential to occur will benefit from prescribed burning as they are all at risk from fire suppression due to either requiring fire to create habitat openings in areas of dense chaparral (Santa Cruz Mountains beardtongue) or require fire to stimulate germination of the seedbank (Anderson's manzanita and arcuate bush-mallow).*						
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, 3.6	PS / SU	SPR BIO-1, 2, 3, 4, 5, 8, 10, 11 SPR HYD-1, 3, 4, 5 SPR HAZ-5, 6 MM BIO-2a, 2b, 2c, 2d, 2e, 2f, 2g, 2h, 3a, 3b, 3c, 4	Yes	LTSM	☒
Project treatment (prescribed broadcast burning, prescribed pile burning, manual treatment, mechanical treatment, herbicide use) could result in direct or indirect adverse effects to special-status wildlife species, because suitable habitat for some species is present in the project area. The potential for adverse effects to special-status wildlife is within the scope of the activities and impacts addressed in the PEIR, because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. *With implementation of Mitigation Measure BIO-2a and Mitigation Measure BIO-2b, the residual effects of the treatments would be less than significant under CEQA because implementation of the treatment will maintain habitat function of the special-status wildlife species' habitat. Any unintentional disturbance or loss of special-status species would not substantially reduce the number or restrict the range of the species. This is consistent with the determination in the PEIR.*						
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	Impact BIO-3, 3.6	PS	SPR BIO-1, 2, 3, 4, 5, 6, 8, 9 SPR HYD-	Yes	LTS	☒

			4, 5 MM BIO- 3a, 3b, 3c			

Project treatments (prescribed broadcast burning, prescribed pile burning, manual treatment, mechanical treatment, herbicide use) could result in direct or indirect adverse effects to sensitive natural communities with a ranking of S3 which occur in the project area including redwood forest, brittle leaf - woolly leaf manzanita chaparral, madrone forest, and tanoak forest. Additionally, interior live oak woodland and forest (S4) occurs in the project area. While these S3 ranked natural communities are considered sensitive, they are common within the project area, in the surrounding lands of Nisene Marks State Park and the Soquel Demonstration State Forest, within Santa Cruz county, and within the Central California region generally. Stands of these sensitive natural communities extend far beyond the boundaries of the project area and will not see any treatment as part of this project. With implementation of Mitigation Measure BIO-3a, the potential for adverse effects to sensitive habitats is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR.

Several small ephemeral/intermittent (Class II and III) watercourses occur in the project area that flow water seasonally during the rainy season or for short periods during and immediately following significant rain. Most of the watercourses are high in the watersheds given the largely ridgetop nature of the project. No riparian vegetation is located along any of the watercourses; no perennial streams/riparian vegetation occurs in the project area. One small perennial pond fed by a spring (Sulphur Springs) occurs in the project area, but does not support fish or aquatic/riparian vegetation. Though no attributes associated with riparian habitat are apparent with these small watercourses, if any were to be classified as riparian habitat or a sensitive natural community, no loss or degradation or loss of habitat function will occur with the proposed project activities for the following reasons:

- *The use of low intensity broadcast burning where Class III watercourses are present is consistent with the natural fire regime, which generally varied from low to moderate intensity, depending on the fuel type.*
- *Heavy equipment use will not occur in Class III watercourse except at existing crossings.*
- *WLPZs and ELZs as defined by 14 CCR Section 916.5 will be established around these watercourses*

Additionally, CDFW and Central Coast WQCB were consulted regarding the project (refer to attached correspondence). CDFW had no concerns with the project and WQ did not respond.

Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	Impact BIO-4, 3.6	PS	SPR BIO-1 SPR HYD- 1, 3, 4, MM BIO- 4	No	N/A	☒

There are no State or Federally Protected Wetlands as defined in the EIR in the project area. Wetland areas downslope and downstream of the project will not be impacted by project activities through implementation of SPR HYD-4 and project design features such as low to moderate intensity burning, sufficient buffers between the project area and wetlands, post-burn residual vegetation and erosion control methods on containment lines.

Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	Impact BIO-5, 3.6	PS	SPR BIO-1, 4, 5, 10, 11 SPR HYD-1, 4 MM BIO- 5	Yes	LTS	☒
Project treatment (prescribed broadcast burning, prescribed pile burning, manual treatment, mechanical treatment, herbicide use) could result in direct or indirect adverse effects to wildlife movement corridors and nurseries because suitable habitat is present in the project area. The potential for treatment activities to result in adverse effects to wildlife movement corridors and nurseries was examined in the PEIR. *No known wildlife nursery sites or indications of nursery sites, such as deer fawning habitat or potential rookery trees with whitewash, were identified. The potential for adverse effects to wildlife movement corridors and nurseries is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and extent of expected disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR.*						
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	Impact BIO-6, 3.6	LTS	SPR BIO-1, 2, 3, 4, 5, 12	Yes	LTS	☒
Project treatment (prescribed broadcast burning, prescribed pile burning, manual treatment, mechanical treatment, herbicide use) could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife, including nesting birds, because suitable habitat is present in the project area. The potential for adverse effects to common wildlife, including nesting birds, is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and extent of expected disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. Nesting bird surveys per SPR BIO-12 will be conducted between March 1st to August 31st where feasible, if operations are proposed during that time period.						
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	Impact BIO-7, 3.6	No Impact	SPR AD- 3	No	N/A	☒
The potential for treatment activities to result in conflict with local policies or ordinances was examined in the PEIR. Vegetation treatment projects implemented under the CalVTP that are subject to local policies or ordinances would be required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures related to protection of biological resources, per SPR AD-3. Consistent with the determination in the PEIR, the proposed project would result in no impact.						
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	Impact BIO-8, 3.6	No Impact	N/A	No	N/A	☒
Implementation of the proposed vegetation treatment and treatment maintenance would not result in conflict with adopted habitat conservation plans (HCP) or natural community conservation plans (NCCP), because the treatment site is not within the plan area of any adopted HCP or NCCP.						

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. 1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.** 2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. This SPR applies to all treatment activities and treatment types.	Yes Yes No	CAL FIRE Prior	CAL FIRE
A CNDDB 12 quad search was conducted on April 29th 2021, the project area is within the 7.5' USGS Laurel and Loma Prieta quadrangle maps. Review of Appendix BIO-3, Table 1a and Table 1b, in the PEIR (Volume II) for special-status plants and wildlife that could occur in the Central California Coast ecoregion was reviewed. Complete lists of species with potential to occur in the treatment site are included. Additionally, CAL FIRE consulted with CDFW staff on July 6th 2021 and recommendation are incorporated into the project design (see Section 1, Wildlife/Fisheries Habitat and Sensitivity to Project Activities). *Based on this query and local knowledge of the area, biological scoping was conducted for species with habitat potential in the project area. Although the biological scoping indicates numerous special status species have habitat potential in the project area and special status species are present, analysis of project impacts concluded no species would be adversely affected with implementation of the following SPR's and MM's. The tables attached at the end of EC-5 summarize the scoping and subsequent impact analysis for each species from the 12-quad query.*			
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
Biological resource training will be conducted for workers prior to and during project implementation as necessary.			
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	Prior-During	CAL FIRE
Sensitive natural communities present in the project site were surveyed by CAL FIRE Environmental Scientist Matthew Mosher on June 25, 2021. Identified sensitive natural communities include: • *Redwood forest (S3)*			

• *Brittle leaf – woolly leaf manzanita chaparral (S3)* • *Madrone forest (S3)* • *Tanoak forest (S3)* • *Interior live oak woodland and forest (S4)* *Please refer to Mitigation Measure BIO-3a for mitigation regarding impacts to these sensitive natural communities.*			
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.	No	N/A	N/A
No Class I watercourses occur in the project area. Class II and III watercourses do occur sporadically, which flow intermittently during the rainy season or temporarily following significant rain events and do not support riparian vegetation or aquatic organisms. One small perennial pond fed by a spring (Sulphur Springs) occurs in the project area, but does not support fish or aquatic/riparian vegetation. SPR-BIO-4 is not applicable because riparian vegetation is not present, trees are not proposed to be felled near or into streams, shading has no effect due to short periods of flow immediately following significant rain, little if any ground disturbance will occur, WLPZs and ELZs as defined by 14 CCR Section 916.5 will be established around these watercourses, and CDFW has no concerns with the project as proposed.			
SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. These SPR requirements apply to all treatment activities and all treatment types. Additional measures will be applied to ecological restoration treatment types	Yes	CAL FIRE During	CAL FIRE
The project area contains areas of brittle leaf - woolly leaf manzanita chaparral. Treatments within this vegetation type will comply with restrictions specified in Mitigation Measure BIO-3a to maintain habitat function in sensitive natural communities. These include the following: • *Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval as defined in the California Manual of Vegetation or in the scientific literature.* • *Treatments will not remove more than 20% of the native vegetation relative cover from a stand of a sensitive natural community.* • *Treatments will not occur in more than 20% of a stand of a sensitive natural community.* *Additionally, significant regeneration from root stock and/or the seed bank will also occur immediately following treatment, whether it be manual, mechanical, prescribed broadcast burning or prescribed pile burning. Herbicide use in chaparral will be limited to within 10 feet of roads. Therefore, the project will not result in type conversion or loss of habitat function in chaparral.*			
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 Prior-During	CAL FIRE

Personnel utilized on this project will be advised of the requirement that equipment coming to or leaving the project area will need to be washed in accordance with SPR-AQ 6. Sudden Oak Death (Phytophthora ramorum) is known to occur in the area, however, none has been seen in the project site. It is most likely that personnel and equipment assigned to work on the project will be from the local area and the concern of pathogens entering from others areas will be low. However, because Fire Crews, Fuels Crews and associated equipment (chainsaws, hand tools, etc.) and vehicles could have been used in other portions of the state either on fires or other fuel treatment projects the crews will be advised to completely clean their equipment, tools and vehicles before arriving on the project site.			
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
Surveys for the special-status plant species identified in Impact BIO-1 will be surveyed for in their potential habitat prior to work commencing.			
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	N/A	N/A
The project area is outside of the Coastal Zone.			
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
Personnel utilized on this project will be advised of the need to be sure equipment coming to or leaving the project area will need to be washed. It is most likely that personnel and equipment assigned to work on the project will be from the local area and the concern of invasive weeds entering from others areas will be low. However, because Fire Crews, Fuels Crews and associated equipment (chainsaws, hand tools, etc.) and vehicles could have been used in other portions of the state either on fires or other fuel treatment projects the crews will be advised to completely clean their equipment, tools and vehicles before arriving on the project site.			
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior	CAL FIRE
On May 29th, June 2nd, and June 25th 2021, CAL FIRE Environmental Scientist Matthew Mosher conducted a site visit to assess habitat for potential species identified during project scoping. Based on this site visit Matthew prepared a Habitat Analysis/Biological Scoping Table			

(End of EC-5). A number of special-status animal species were identified during project scoping. All but six of these species were determined to lack suitable habitat after reviewing their specific habitat requirements or were determined to not be significantly impacted by project activities. The following eight special-status animal species may have suitable habitat in the project area but, if present, will be surveyed for and avoided entirely (except San Francisco dusky-footed woodrat): • *Special-status bird species – The following birds are considered species of special concern and have the potential to occur in the project area, but impacts will be avoided through nesting bird surveys during nesting bird season (SPR-BIO-12): Accipiter cooperii (Cooper's hawk), Lanius ludovicianus (loggerhead shrike), and Scaphinotus behrensi (purple martin).* • *Special-status bats – Both Antrozous pallidus (pallid bat) and Corynorhinus townsendii (Townsend's big-eared bat) have the potential to occur in the project area and may roost within cavities of large trees. Most of the trees to be removed will be small (>10" DBH) and are not suitable for bat roosting. If large trees (>10" DBH) are removed, they will be surveyed for active bat roosts. Any trees with signs of active bat roosts will be removed outside of the maternity season (March 1 to August 31).* • *Neotoma fuscipes annectens (San Francisco dusky-footed woodrat) – Forest habitats of moderate canopy & moderate to dense understory. If nests do occur, none will be intentionally damaged or destroyed by project activities; fire control lines will be modified to avoid nests and associated screen vegetation however, nests in interior burn areas cannot be avoided by fire, if present.* • *Special-status frogs – Both foothill yellow legged frog (Rana boylii) and California red-legged frog (Rana draytonii) have the potential to occur in the project area near Sulphur Springs. If work occurs during the wet season (First 0.25 inches of rain following October 15, lasting until April 15) no work will occur within 100 feet of Sulphur Springs without a pre-treatment survey and biological monitoring. If work occurs during the dry season, no work will occur within 30 feet of Sulphur Springs without a pre-treatment survey and biological monitoring.*			
SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). This SPR applies only to prescribed herbivory and all treatment types.	No	N/A	N/A
SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common 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
If operations are proposed between March 1 and August 31: • *An RPF or qualified biologist will conduct a cursory/visual search of the project area for nesting birds prior to operations where feasible.* • *If an active nest is identified activates within 100 feet of the nest will stop and CDFW contacted to develop an avoidance strategy.* • *See entire SPR for complete avoidance strategies identified in EIR (Establish Buffer, Modify Treatment, Defer Treatment, Monitor Active Raptor Nest During Treatment, Retention of Raptor Nest Trees).* *Mitigation Measure MM BIO-2b of the EIR includes the same protection measures necessary for the protection of nesting birds.* *No impacts are anticipated.*			

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).	No	N/A	N/A
No listed plant species were determined to have the potential to occur in the project area (End of EC-5).			
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
As discussed in Impact BIO-1, Santa Cruz Mountain Penstemon occurs in the project area and Anderson's manzanita and arcuate bush mallow have the potential to occur in the project area. Impacts from manual, mechanical, and ground disturbing activities will avoid these species. Areas containing these species may be burned as they all require fire to reproduce and are considered under threat by fire suppression (see Impact BIO-1).			
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	N/A	N/A
CAL FIRE will avoid significant impacts to special-status plants, and thus compensatory mitigation will not be required.			
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
The only two listed/fully protected species with potential to occur in the project area are foothill yellow-legged frog and California red-legged frog. As discussed under SPR BIO-10, this species will be surveyed for and avoided when working near habitat at Sulphur Springs.			

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
As discussed under SPR BIO-10, all special-status wildlife species with the potential to be impacted by project activities will be surveyed for and avoided, with the possible exception of San Francisco dusky-footed woodrats (if present). Stick houses will be avoided by fire control lines, however any located within interior portions of burn units cannot be protected from fire. Mortality or injury of this species may occur, but per MM BIO-2b, burning will be avoided when possible in known woodrat locations during peak breeding season in mid-spring (April 15 to May 15) and habitat function will not be impacted by this project. Research has shown that Dusky-Footed woodrat populations recover quickly following impacts from prescribed fire[1]. *Aneides niger (Santa Cruz black salamander) and Dicamptodon ensatus (California giant salamander) have the potential to occur near Sulphur Springs. No surveys will take place for these species, but rocks and large logs which are suitable refugia will not be significantly disturbed. Additionally, work will not occur within 100 feet of Sulphur Springs during periods of significant rainfall which may initiate overland amphibian travel.*			
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	N/A	N/A

[1] Lee, Derek E., and Tietje, William D. 2005. Dusky-Footed Woodrat Demography and Prescribed Fire in a California Oak Woodland. Journal of Wildlife Management 69(2):1211-1220; 2005

Per MM BIO-2c, this mitigation is not needed since the provisions of MM BIO-2a, BIO-2b, and BIO-2g can be implemented (BIO-2d, BIO-2e, BIO-2f, BIO-2g are not applicable since the species referenced in these MMs do not have potential to occur in the project area).			
MM BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)	No	N/A	N/A
The project area is not within the range of the 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.	No	N/A	N/A
No special-status butterflies have potential to occur in the project area.			
MM BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)	No	N/A	N/A
No special-status beetles, flies, grasshoppers or snails have potential to occur in 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.	No	CAL FIRE N/A	N/A
No special-status bumble bees have to potential to occur in the project area.			
MM BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)	No	N/A	N/A
Prescribed herbivory is not proposed for this project.			

MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3: The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.	Yes	Prior-During	CAL FIRE
As discussed in Impact BIO-3, numerous S3 ranked sensitive natural communities occur in the project area including redwood forest, brittle leaf - woolly leaf manzanita chaparral, madrone forest, and tanoak forest. Additionally, interior live oak woodland and forest (S4) occurs in the project area. Treatment activities within these habitats will adhere to the relevant restrictions specified in this mitigation measure. These include: • Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval as defined in the California Manual of Vegetation or in the scientific literature. • Treatments will not remove more than 20% of the native vegetation relative cover from a stand of a sensitive natural community. • Treatments will not occur in more than 20% of a stand of a sensitive natural community.			
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	N/A	N/A
As discussed above, impacts to sensitive habitats will adhere to the restrictions in Mitigation Measure BIO-3a. Thus, compensatory mitigation is not required.			
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	N/A	N/A
Project implementation will not result in loss of riparian habitat as only small Class II and III watercourses are present that flow for short periods following significant rain. Any classification of riparian habitat in the project area would be due to interpretation of definition and not in terms of habitat function as no riparian vegetation is present, no hydrophytic plants and hydric soils are present, no near surface ground water is present and no surface flow occurs for durations long enough to support any organisms associated with riparian habitat. Furthermore, MM BIO-3c indicates this Mitigation Measure should be implemented if impacts to riparian habitat remain significant after implementation of SPR BIO-4, which they do not.			

MM BIO-4: Avoid State and Federally Protected Wetlands	No	N/A	N/A
No wetlands occur in the project area.			
MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites	No	N/A	N/A
No nursery habitat is known to occur in the project area.			

Refer to Attachment B, for guidance on the project-specific review and survey procedures for biological resources.

Habitat Analysis / Biological Scoping Table: Santa Rosalia VTP

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Accipiter cooperii	Cooper's hawk	None	None	N/A	Yes	Medium sized raptor that nests and forages in a wide variety of forested areas. Trees will be visually inspected for stick nests in and immediately adjacent to work areas during nesting season and no significant impacts to foraging areas will occur.
Adela oplerella	Opler's longhorn moth	None	None	N/A	No	Generally restricted serpentine grassland but can also occur in high quality native grassland. Grasslands will not be impacted by project implementation.
Agelaius tricolor	tricolored blackbird	None	Threatened	N/A	No	Not known from project vicinity. Requires open water with protected nesting substrate, which is not present in the project area.
Ambystoma californiense	California tiger salamander	Threatened	Threatened	N/A	No	Breeds in ephemeral pools and spends most of the year underground in small mammal borrows. No records exist in the Santa Cruz Mountains, and no suitable breeding pools are present in the project area.
Ambystoma macrodactylum croceum	Santa Cruz long-toed salamander	Endangered	Endangered	N/A	No	Occurs in wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey County. Project area is well above sea level.
Ammodramus savannarum	grasshopper sparrow	None	None	N/A	No	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting. The project site is composed almost entirely of forests and chaparral, with only limited and marginal grassland habitat which will not be impacted. This species is not expected to occur.
Aneides niger	Santa Cruz black salamander	None	None	N/A	Yes	Occurs in mixed deciduous woodland, coniferous forests, coastal grasslands. Found under rocks near streams, in talus, under damp logs, and other objects. Most of the project area occurs on dry

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
						ridgetop and upper slope locations which are not suitable habitat for this species. There is potential for this species to occur on the northern end of the project area in the Soquel Demonstration Forest, where the project area abuts Sulphur Springs. Rocks and large logs which are suitable refugia will not be significantly disturbed. Additionally, work will not occur within 100 feet of Sulphur Springs during periods of significant rainfall which may initiate overland amphibian travel.
Anniella pulchra	northern California legless lizard	None	None	N/A	No	Occurs in chaparral, coastal dunes, and coastal scrub in sandy or loose loamy soils under sparse vegetation. Not known to occur in the Santa Cruz Mountains. No impacts are anticipated.
Antrozous pallidus	pallid bat	None	None	N/A	Yes	Pallid bats may forage in a broad range of habitats, including those present in the project area. Suitable roosting habitat, in the form of tree cavities, caves, or buildings, may exist within the study area. Most of the trees to be removed will be small (<10" DBH) and are not suitable for bat roosting. If large trees (>10" DBH) are removed, they will be surveyed for active bat roosts. Any trees with signs of active bat roosts will be removed outside of the maternity season (March 1 to August 31).
Aquila chrysaetos	golden eagle	None	None	N/A	No	Occurs in a variety of habitats, nesting on cliff-walled canyons and large trees in open areas. Suitable nesting habitat is not present in the project area, as large cliffs are absent and open foraging areas situated near large trees do not occur.
Athene cunicularia	burrowing owl	None	None	N/A	No	Occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Project work will be limited to areas of dense forest or dense, tall shrub cover which do not support suitable habitat.
Bombus caliginosus	obscure bumble bee	None	None	N/A	No	Occurs in coastal areas from Santa Barbara county to north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia. In the project region, these species are generally restricted to grassland habitat. This habitat may occur within or adjacent to the project area, however meadows and grasslands will not be impacted by project implementation. No impacts are expected.
Bombus crotchii	Crotch bumble bee	None	Candidate	N/A	No	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum. In the project region, these species are generally restricted to grassland habitat. This habitat may occur within or adjacent to the project area, however

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
						meadows and grasslands will not be impacted by project implementation. No impacts are expected.
Bombus occidentalis	western bumble bee	None	Candidate	N/A	No	Western bumble bee nests, forages, and overwinters in meadows and grasslands with abundant floral resources. This habitat may occur within or adjacent to the project area, however meadows and grasslands will not be impacted by project implementation. No impacts are expected.
Brachyramphus marmoratus	marbled murrelet	Threatened	Endangered	N/A	No	Nesting habitat consists of large second growth or old growth coastal redwood and Douglas fir, with appropriate branch structure to form nesting platforms. The project area consists of ridgetop of upper slope second growth forests which do not support large trees. No records of this species exist within 10 miles of the project area.
Buteo swainsoni	Swainson's hawk	None	Threatened	N/A	No	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. The project site is composed almost entirely of forests and chaparral, with only limited and marginal grassland habitat. This species is not expected to occur.
Cicindela ohlone	Ohlone tiger beetle	Endangered	None	N/A	No	This beetle is known only from coastal terraces supporting remnant patches of native grassland habitat, which are not present in the project area.
Corynorhinus townsendii	Townsend's big-eared bat	None	None	N/A	Yes	This bat may forage in the project area. Nesting and roosting habitat include caves, empty structures or large basal hollows which may exist in the project area. Most of the trees to be removed will be small (<10" DBH) and are not suitable for bat roosting. If large trees (>10" DBH) are removed, they will be surveyed for active bat roosts. Any trees with signs of active bat roosts will be removed outside of the maternity season (March 1 to August 31).
Coturnicops noveboracensis	yellow rail	None	None	N/A	No	Does not occur as breeder in project region, no suitable habitat present in project area (grassy marshes and meadows). No impacts are expected.
Cypseloides niger	black swift	None	None	N/A	No	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf. No breeding habitat in project area, could occur sporadically as forager. No impacts expected.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Danaus plexippus	monarch - California overwintering population	Candidate	None	N/A	No	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. A eucalyptus stand occurs in the project area. However, it occupies a dry, exposed ridgetop location, away from the immediate coast and without a water source. Not expected to occur.
Dicamptodon ensatus	California giant salamander	None	None	N/A	No	Occurs in wet coastal forests in or near clear, cold permanent and semi-permanent streams and seepages. Found under rocks near streams, in talus, under damp logs, and other objects. Most of the project area occurs on dry ridgetop and upper slope locations which are not suitable habitat for this species. There is potential for this species to occur on the northern end of the project area in the Soquel Demonstration Forest, where the project area abuts Sulphur Springs. Rocks and large logs which are suitable refugia will not be significantly disturbed. Additionally, work will not occur within 100 feet of Sulphur Springs during periods of significant rainfall which may initiate overland amphibian travel.
Dipodomys venustus venustus	Santa Cruz kangaroo rat	None	None	N/A	No	This animal is restricted to Zayante soils, which are not present in the project area.
Elanus leucurus	white-tailed kite	None	None	N/A	No	Occurs in rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. No habitat present in project area.
Emys marmorata	western pond turtle	None	None	N/A	No	An aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Utilizes upland areas for nesting. The dry ridgetop and upper slope locations of this project are not suitable habitat for this species. Sulphur Springs, the only perennial aquatic feature in the project area, is small (10'x20') and only holds a few inches of water which is not suitable for western pond turtle. Nearby potential habitat include Soquel Creek and the pond referenced in CNDDB Occurrence #106. These areas are far enough away from the project area (>100 meters) to avoid impacts.
Eucyclogobius newberryi	tidewater goby	Endangered	None	N/A	No	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. No brackish water habitats occur in the project area.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Euphilotes enoptes smithi	Smith's blue butterfly	Endangered	None	N/A	No	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz counties. No coastal dune or coastal sage scrub occurs in the project area.
Euphydryas editha bayensis	Bay checkerspot butterfly	Threatened	None	N/a	No	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. Habitat does not occur in the project area.
Falco peregrinus anatum	American peregrine falcon	None	None	N/A	No	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. No suitable nesting structures present in project area.
Lanius ludovicianus	loggerhead shrike	None	None	N/A	Yes	Occurs in broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. Generally occurs in lower elevation oak woodland and chaparral, although may occur sporadically in the project area. Nesting birds will be surveyed for and avoided. No impacts are expected.
Laterallus jamaicensis coturniculus	California black rail	None	Threatened	N/A	No	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. No salt marsh habitat present in project area.
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	None	None	N/A	Yes	Forest habitats of moderate canopy & moderate to dense understory. If nests do occur, none will be intentionally damaged or destroyed by project activities; fire control lines will be modified to avoid nests and associated screen vegetation however, nests in interior burn areas cannot be avoided by fire, if present.
Oncorhynchus kisutch	coho salmon - central California coast ESU	Endangered	Endangered	N/A	No	Occurs in open ocean, estuaries, and rivers. Require beds of loose, silt-free, coarse gravel for spawning. Work will not occur in riparian areas. No impacts expected.
Oncorhynchus mykiss irideus	steelhead - central California coast DPS	Threatened	None	N/A	No	Occurs in cool streams with suitable spawning habitat and no dispersal barriers such as dams. Work will not occur in riparian areas. No Impacts are expected
Pandion haliaetus	osprey	None	None	N/A	No	Occurs in ocean shore, bays, freshwater lakes, and larger streams. No habitat occurs in the project area.
Phrynosoma blainvillii	coast horned lizard	None	None	N/A	No	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. No records of this species in the Santa Cruz Mountains.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Polyphylla barbata	Mount Hermon (=barbate) June beetle	Endangered	None	N/A	No	This insect occurs in Zayante soil series, which is not present in the project area.
Scaphinotus behrensi	purple martin	None	SSC	N/A	Yes	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag. No human-made structures or tall, isolated trees will be removed. Additionally, surveys for nesting birds will be conducted during the nesting bird season. No impacts expected.
Rana boylii	foothill yellow-legged frog	None	Endangered	N/A	Yes	Occurs in partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Known occurrences of FYLF occur at Sulphur Springs, and FYLF is abundant in the Soquel Demonstration Forest in Soquel and Amaya Creek (greater than 400 feet from the project area). If work occurs during the wet season (First 0.25 inches of rain following October 15, lasting until April 15) no work will occur within 100 feet of Sulphur Springs without a pre-treatment survey and biological monitoring. If work occurs during the dry season, no work will occur within 30 feet of Sulphur Springs without a pre-treatment survey and biological monitoring.
Rana draytonii	California red-legged frog	Threatened	None	N/A	Yes	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. CRLF has been observed in Peters Creek downstream of the project area. CRLF occurs in the Soquel Demonstration State Forest (SDSF), in Soquel Creek outside of the project area and has been observed once at Sulphur Springs although habitat quality there is poor. Herpetological monitoring in SDSF has been conducted regularly over the last 10 years and CRLF are very rarely observed (Lawrence Erikson pers comm). If work occurs during the wet season (First 0.25 inches of rain following October 15, lasting until April 15) no work will occur within 100 feet of Sulphur Springs without a pre-treatment survey and biological monitoring. If work occurs during the dry season, no work will occur within 30 feet of Sulphur Springs without a pre-treatment survey and biological monitoring.
Riparia riparia	bank swallow	None	Threatened	N/A	No	Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole. Suitable nesting habitat not present in project area.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Scaphinotus behrensi	Behrens' snail-eating beetle	None	No	N/A	No	Occurs in redwood forest. The CNDDB record is severely disjunct from the rest of the population, and is likely a misidentification (CNNDB 2021). Not expected to occur.
Taxidea taxus	American badger	None	None	N/A	No	Suitable habitat is characterized by herbaceous, shrub and open stages of most habitats with dry, friable soils. Most of the habitats in the project area are dense late-seral forest and shrub communities. American badger is not expected to occur.
Thaleichthys pacificus	eulachon	Threatened	None	N/A	No	Found in Klamath River, Mad River, Redwood Creek, and in small numbers in Smith River and Humboldt Bay tributaries. Does not occur in the coastal rivers of the Santa Cruz Mountains.
Trimerotropis infantilis	Zayante band-winged grasshopper	Endangered	None	N/A	No	This animal is restricted to Zayante soil series, which are not present in the project area.
Tryonia imitator	mimic tryonia (=California brackishwater snail)	None	No	N/A	No	Habitat is coastal lagoon or brackish water in estuarine stream mouths. No habitat occurs in the project area.
Vulpes macrotis mutica	San Joaquin kit fox	Endangered	Threatened	N/A	No	Occurs in annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base. Does not occur in the Santa Cruz Mountains.
Agrostis blasdalei	Blasdale's bent grass	None	None	1B.2	No	Occurs in coastal dunes, coastal bluff scrub, coastal prairie. No habitat present in project area.
Amsinckia lunaris	bent-flowered fiddleneck	None	None	1B.2	No	Occurs in cismontane woodland, valley and foothill grassland, coastal bluff scrub. No habitat present in project area.
Arctostaphylos andersonii	Anderson's manzanita	None	None	1B.2	Yes	Limited areas of chaparral occur in the project area. CNDDB Occurrence #50 occurs in the northeastern portion of the project area near Santa Rosalia Mountain. This species will be flagged and avoid by manual, mechanical, and ground disturbing activities if found. May be burned as this species is an obligate seeder which requires bare mineral soil and fire to germinate, is considered under threat by fire suppression (ESF 2021).
Arctostaphylos hookeri ssp. hookeri	Hooker's manzanita	None	None	1B.2	No	Hooker's manzanita is restricted to low-lying areas near the coast in southern Santa Cruz and Northern Monterey counties. No potential to occur in the project area.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Arctostaphylos pajaroensis	Pajaro manzanita	None	None	1B.1	No	Pajaro manzanita is restricted to low-lying areas near the coast in southern Santa Cruz and Northern Monterey counties. No potential to occur in the project area.
Arctostaphylos silvicola	Bonny Doon manzanita	None	None	1B.2	No	Restricted to Zayante soil series, which does not occur in the project area
Arenaria paludicola	marsh sandwort	Endangered	Endangered	1B.1	No	Occurs in marshes and swamps dominated by tall, emergent obligate wetland vegetation such as cattails (*Typha* sp.). Considered extirpated from the project region.
Calyptridium parryi var. hesseae	Santa Cruz Mountains pussypaws	None	None	1B.1	No	Occurs in chaparral and cismontane woodland. This species often occurs in disturbed areas or in poor soil where these is little competition. Aside from the compacted roadbed where no plants of any type occur, disturbed areas or poor soil with little competition is not found in the project area. No habitat present.
Campanula californica	swamp harebell	None	None	1B.2	No	Occurs in bogs and fens. No habitat present in project area.
Carex comosa	bristly sedge	None	None	2B.1	No	Occurs on lake margins and in wet places. No habitat present in project area.
Carex saliniformis	deceiving sedge	None	None	1B.2	No	Occurs in coastal prairie, coastal scrub, meadows and seeps, marshes and swamps (coastal salt). No habitat present in project area.
Castilleja affinis var. neglecta	Tiburon paintbrush	Endangered	Threatened	1B.2	No	Occurs in rocky serpentine sites in grasslands. No serpentine soils occur in the project area.
Castilleja rubicundula var. rubicundula	pink creamsacs	None	None	1B.2	No	Occurs in openings in chaparral or on grassland, restricted to serpentine soils. No serpentine soils occur in the project area.
Ceanothus ferrisiae	Coyote ceanothus	Endangered	None	1B.1	No	Occurs in chaparral, valley and foothill grassland, and costal scrub habitats on serpentine soils in the Mount Hamilton Range.
Centromadia parryi ssp. congdonii	Congdon's tarplant	None	None	1B.1	No	Occurs along margins on vernally moist alkaline grassland. No habitat present in the project area.
Charadrius alexandrinus nivosus	western snowy plover	Threatened	None	N/A	No	Occurs in sandy beaches, salt pond levees, and shores of large lakes, which are absent from the project area.
Chlorogalum pomeridianum var. minus	dwarf soaproot	None	None	1B.2	No	Occurs in chaparral on serpentine soils. No serpentine soils occur in the project area.
Chorizanthe pungens var. hartwegiana	Ben Lomond spineflower	Endangered	None	1B.1	No	Restricted to Zayante soil series, which does not occur in the project area.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Chorizanthe pungens var. pungens	Monterey spineflower	Threatened	None	1B.2	No	Occurs in sandy soils (marine sand deposits) in coastal dunes or more inland within chaparral or other habitats. No marine sand deposits present in the project area.
Chorizanthe robusta var. hartwegii	Scotts Valley spineflower	Endangered	None	1B.1	No	Occurs on margins of barren or bryophyte dominated patches of Purisima Formation sandstone or Santa Cruz Mudstone outcrops in coastal prairie. No habitat occurs in the project area.
Chorizanthe robusta var. robusta	robust spineflower	Endangered	None	1B.1	No	Occurs in cismontane woodland, coastal dunes, coastal scrub, chaparral on marine sand deposits or sandstone outcrops. This species is restricted to coastal or near coastal habitat. Project site is too far from coastal influence to support this species.
Cirsium fontinale var. campylon	Mt. Hamilton thistle	None	None	1B.2	No	Occurs in open habitats on seasonal and perennial drainages, restricted to serpentine soils. No serpentine soils occur in the project area.
Collinsia multicolor	San Francisco collinsia	None	None	1B.2	No	Shaded herb-rich understory of coast live oak (*Quercus agrifolia* var. *agrifolia*) woodland or mixed forest in sheltered, generally mesic, canyon bottom settings; in Santa Clara County occurs on the edge of serpentine chaparral; 30–250 m. This species appears to be disturbance-dependent and favors open areas at the toe of steep slopes where soil movement has recently occurred (ESF 2021). No habitat is present in the project area.
Dacryophyllum falcifolium	tear drop moss	None	None	1B.3	No	Occurs on limestone substrates and rock outcrops, which are not present in the project area.
Dudleya abramsii ssp. setchellii	Santa Clara Valley dudleya	Endangered	None	1B.1	No	Occurs on rocky serpentine outcrops. No habitat present in the project area.
Eriogonum nudum var. decurrens	Ben Lomond buckwheat	None	None	1B.1	No	Restricted to Zayante soil series, which does not occur in the project area
Eryngium aristulatum var. hooveri	Hoover's button-celery	None	None	1B.1	No	Occurs in vernal pools. Not known to occur in the Santa Cruz Mountains. No habitat present in project area.
Erysimum ammophilum	sand-loving wallflower	None	None	1B.2	No	Occurs on sandy openings in chaparral (maritime), coastal dunes, coastal scrub. No habitat present in project area.
Erysimum teretifolium	Santa Cruz wallflower	Endangered	Endangered	1B.1	No	Restricted to Zayante soil series, which does not occur in the project area
Fissidens pauperculus	minute pocket moss	None	None	1B.2	No	Moss growing on damp soil along the coast. In dry streambeds and on stream banks. Streambed and bank habitat will not be impacted.
Fritillaria liliacea	fragrant fritillary	None	None	1B.2	No	Occurs in Adobe or clay-rich soils in coastal prairie or native bunchgrass grasslands, frequently on serpentine-derived soils. Not

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
						known to occur in the Santa Cruz Mountains. No habitat present in the project area.
Gilia tenuiflora ssp. arenaria	Monterey gilia	Endangered	Threatened	1B.2	No	Occurs in chaparral, cismontane woodland, and riparian woodland on serpentine soil in mesic sittings. No serpentine soils present in the project area.
Hesperocyparis abramsiana var. abramsiana	Santa Cruz cypress	Threatened	Endangered	1B.2	No	Restricted to granite and sandstone derived soils on and adjacent to Ben Lomond Mountain.
Hoita strobilina	Loma Prieta hoita	None	None	1B.1	No	Restricted to serpentine soils, which do not occur in the project area.
Holocarpha macradenia	Santa Cruz tarplant	Threatened	Endangered	1B.1	No	Occurs in coastal prairie on marine terraces. No coastal prairie habitat occurs in the project area.
Horkelia cuneata var. sericea	Kellogg's horkelia	None	None	1B.1	No	Restricted to openings in old dunes and coastal sandhills, which do not occur in the project area.
Horkelia marinensis	Point Reyes horkelia	None	None	1B.2	No	Occurs in coastal dunes, coastal prairie, coastal scrub. No habitat present in project area.
Lasthenia californica ssp. macrantha	perennial goldfields	None	None	1B.2	No	Occurs in coastal bluff scrub, coastal dunes, coastal scrub. No habitat present in the project area.
Lessingia micradenia var. glabrata	smooth lessingia	None	None	1B.2	No	Restricted to serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland. No habitat present in the study area.
Malacothamnus arcuatus	arcuate bush-mallow	None	None	1B.2	Yes	Occurs in chaparral, cismontane woodland. Limited habitat occurs in the project area. This species will be flagged and avoid by manual, mechanical, and ground disturbing activities if found. May be burned as this species is an obligate seeder which requires bare mineral soil and fire to germinate, is considered under threat by fire suppression (Neubauer 2013).
Malacothamnus hallii	Hall's bush-mallow	None	None	1B.2	No	Restricted to areas of the Santa Clara Valley and Diablo Range. Not known to occur in the Santa Cruz Mountains.
Microseris paludosa	marsh microseris	None	None	1B.2	No	Occurs in vernally moist to saturated sites in coastal terrace prairie, which are absent from the project area.
Monardella sinuata ssp. nigrescens	northern curly-leaved monardella	None	None	1B.2	No	Occurs in coastal dunes, coastal scrub, chaparral, lower montane coniferous forest (ponderosa pine sandhills). Only occurs inland from coast in ponderosa pine sandhills. No habitat present in the project area.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Monolopia gracilens	woodland woollythreads	None	None	1B.2	No	Occurs in serpentinitic areas in grasslands or openings in chaparral or oak woodlands. No habitat potential in the project area due to lack of serpentine soils and dense stands of brush and tree canopy.
Pedicularis dudleyi	Dudley's lousewort	None	Rare	1B.2	No	Species inhabits shaded areas in redwood forests and is associated with areas of bare mineral soil such as road cuts. Historically, this species was likely associated with low intensity fires which provided bare mineral soil underneath dense redwood canopy. Due to the history of fire exclusion in this area, and absence of bare mineral soil, this species lacks suitable habitat in the project area.
Penstemon rattanii var. kleei	Santa Cruz Mountains beardtongue	None	None	1B.2	Yes	Occurs in the project area and is very abundant following the chaparral prescribed burn project implemented on Santa Rosalia Mountain in 2019. Originally only numbering a few plants, this occurrence is now robust and numbers in the hundreds. Project implementation in this area will continue to benefit this species.
Pentachaeta bellidiflora	white-rayed pentachaeta	Endangered	Endangered	1B.1	No	Occurs in open dry rocky slopes and grassy areas, which are absent from the project area.
Piperia candida	white-flowered rein orchid	None	None	1B.2	No	Occurs in open to shady sites, conifer and mixed-evergreen forest. Mostly occurs north of the Bay Area. Some disjunct populations occur in northern Santa Cruz county, however there are no occurrences in southern Santa Cruz county. Considered absent.
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	None	None	1B.2	No	Occurs in Vernally wet swales, vernal pools, and saturated soils of herbaceous-plant dominated cliffs and marsh edges along the coast; set in coastal prairie and openings and meadows in oak woodland or mixed-evergreen forest. No habitat present in project area.
Plagiobothrys diffusus	San Francisco popcornflower	None	Endangered	1B.1	No	Sparsely vegetated, mesic sites in coastal prairie or serpentine bunchgrass grasslands. No habitat present in project area.
Plagiobothrys glaber	hairless popcornflower	None	None	1A	No	Historically from grassy slopes with marine influence. No known extant occurrences. Not known to historically occur in the Santa Cruz Mountains.
Polygonum hickmanii	Scotts Valley polygonum	Endangered	Endangered	1B.1	No	Isolated patches of shallow soil underlain by outcrops of Santa Cruz mudstone and Purisima Formation sandstone in fragments of coastal prairie (ESF 2021), which do not occur in the project area. The only populations for this plant occur in the Scotts Valley grasslands. No impact is expected.

Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank	Present/ Habitat Potential	Rational / Impact Potential
Sanicula saxatilis	rock sanicle	None	Rare	1B.2	No	Occurs in Bedrock outcrops and talus slopes in chaparral or oak woodland habitat. No habitat occurs in the project area.
Senecio aphanactis	chaparral ragwort	None	None	2B.2	No	Restricted to drying alkaline flats and dry open rocky areas, which do not occur in the project area.
Stebbinsoseris decipiens	Santa Cruz microseris	None	None	1B.2	No	Occurs in sheltered grass and herb rich understory of coast live oak (Quercus agrifolia var. agrifolia) savannah; openings in coastal scrub or chaparral on shale or mudstone where grass competition is reduced. No habitat present in project area.
Streptanthus albidus ssp. albidus	Metcalf Canyon jewelflower	Endangered	None	1B.1	No	Occurs in relatively open areas in dry grassy meadows on serpentine soils. No habitat occurs in project area.
Streptanthus albidus ssp. peramoenus	most beautiful jewelflower	None	None	1B.2	No	Occurs on serpentine outcrops, on ridges and slopes. No habitat occurs in the project area.
Trifolium buckwestiorum	Santa Cruz clover	None	None	1B.1	No	Occurs in vernally moist swales, saturated, clay-rich upland soils in coastal prairie, vernally moist dune hollows, and edges of humic-soil meadow openings in forest. No habitat occurs in the project area.
Trifolium polyodon	Pacific Grove clover	None	Rare	1B.1	No	Occurs in vernally moist swales in coastal prairie, or vernally moist dune hollows, often on the edges of old roadbeds. No habitat occurs in the project area.
Central Dune Scrub		None	None	N/A	No	Does not occur in the project area, restricted to the immediate coast.
Coastal and Valley Freshwater Marsh		None	None	N/A	No	Not known to occur in the project area. All wetlands, if present, will be avoided by project activities.
Maritime Coast Range Ponderosa Pine Forest		None	None	N/A	No	Restricted to the Zayante Soil type, which does not occur in the project area.
Northern Maritime Chaparral		None	None	N/A	Yes	Occurs in the project area at Sand Point, however most of the chaparral which occurs in the project area is above the zone of common summer fog incursion and is likely better characterized as Northern Mixed Chaparral. Regardless, this chaparral type is considered a sensitive natural community by CDFW and will be subject to the restrictions presented in Mitigation Measure Bio-3a.
Serpentine Bunchgrass		None	None	N/A	No	No serpentine soils occur in the project area.
Sycamore Alluvial Woodland		None	None	N/A	No	This habitat type does not occur in the upper elevations of the Santa Cruz Mountains.
North Central Coast Drainage Sacramento Sucker/Roach River		None	None	N/A	No	Project area is located on ridgetop and upper slope positions, this habitat type does not occur in the project area.

References:
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[CNDDB] California Natural Diversity Database. 2021. Rarefind 5.0. California Department of Fish and Wildlife. http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp
[CNPS] California Native Plant Society. 20210. Inventory of Rare and Endangered Plants. http://www.cnps.org/inventory.
[ESF] Elkhorn Slough Foundation. 2021. Endangered Species Fact Sheets. http://www.elkhornsloughctp.org/factsheet/
Neubauer, D. 2013. Annotated Checklist of the Vascular Plants of Santa Cruz County, California. Second Edition.

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

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	Impact Geo-1, 3.7	LTS	SPR GEO-1, 2, 3, 4, 5, 6, 7, 8, SPR HYD-3 SPR AQ- 3 SPR HYD- 4	Yes	LTS	☒
Project treatment would include manual treatment, prescribed burning (pile burning and broadcast burning), mechanical treatment and herbicide treatment, which would result in vegetation removal and soil disturbance. Potential impacts related to soil erosion during implementation of the treatment project are within the scope of the of the activities and impacts addressed in the PEIR because the extent of vegetation removal and intensity of prescribed burning proposed are consistent with those analyzed in the PEIR.						
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 soil survey was prepared for the project site (Attachment D). No tractor operations will take place on slopes over 35% with the exception of possible fire control line construction. All control lines will be water barred immediately upon completion of burning activities. Known unstable areas will be avoided from project activities. Potential impacts related to landslides during implementation of the treatment project are within the scope of the activities and impacts addressed in the PEIR because the extent of vegetation removal, intensity of prescribed burning, and avoidance of steep slopes are consistent with those analyzed in the PEIR.						

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
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
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.	No	N/A	N/A
Mechanical treatments will not result in disturbed soil over 50% of the treatment area. Areas of bare soil over 50% may be present following prescribed burning, though overstory canopy cover will remain. Bare areas will be covered quickly postburn; either through fallen leaf litter or the sprouting of forbs and/or shrubs from root collars within weeks following the burn. The mulching of areas is not necessary and is not practical.			
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
Water bars will be installed on control lines immediately following burning activities.			

SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types.	Yes	CAL FIRE During-Post	CAL FIRE
Water breaks shall be installed diagonally as a trench at least 6-inches in to a firm ground base with a minimum of a 6-inch berm on the downhill side so that water can be intercepted and directed away from the exposed control line surface. The exit area for the water must be free of blockages allowing for free flow of water. Water breaks shall be installed mid slope of control lines on slopes greater than 50% at 75 feet, 26-50% at 100 feet, 11-25% at 150 feet, and 10% or less at 200 feet.			
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
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
No tractor operations will take place on slopes over 35% with the exception of possible control line construction. All control lines will be water barred immediately upon completion of burning activities.			
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
Consistent with SPR GEO-7, no tractor operations will take place on slopes over 35% with the exception of possible control line construction. If any line control construction occurs on slopes over 50%, unstable areas and soils will be evaluated; no other treatment activities proposed with the project are subject to this requirement per SPR GEO-8.			

EC-7: GREENHOUSE GAS EMISSIONS

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

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types.	Yes	CAL FIRE Prior	CAL FIRE

It is estimated the project will produce 3,827 tons of CO_2 from broadcast burning, 4,061 tons of CO_2 from pile burning, 8,168 tons of CO_2 from decomposition of lopped/chipped material and 59 tons of CO_2 from motorized exhaust for a total of 16,115 tons of CO_2; see attached calculations and GHG write up.			
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-During	CAL FIRE
All the methods to reduce GHG emissions listed in MM GHG-2 have been incorporated into the project and will be adhered to as feasible.			

EC-8: Energy

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

EC-9: HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	Impact HAZ-1, 3.10	LTS	SPR HAZ- 1	Yes	LTS	☒
Treatment would include manual treatment, prescribed broadcast burning, prescribed pile burning, mechanical treatment, and herbicide treatment; these treatment activities would require the use of fuels and related accelerants, chemicals, which are hazardous materials. CAL FIRE has an extensive maintenance program assuring equipment used for CAL FIRE projects are in good working order, free of leaks. Fueling of equipment will occur primarily at local CAL FIRE stations. If fueling is needed on larger equipment or firing devises they will be filled on level ground away from any drainages that could lead to watercourses. Additionally, CAL FIRE complies with all herbicide label directions, applies herbicide per recommendations of a licensed PCA, and complies with laws regarding the transport, storage and disposal of herbicides. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	Impact HAZ-2, 3.10	LTS	SPR HAZ- 5, 6, 7, 8, 9	Yes	LTS	☒
CAL FIRE complies with all herbicide label directions, applies herbicide per recommendations of a licensed PCA, and complies with laws regarding the transport, storage and disposal of herbicides. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	Impact HAZ-3, 3.10	PS	MM HAZ- 3	No	N/A	☒
There are no hazardous material sites within the project area.						
Other Impacts to Hazardous Materials, Public Health and Safety: Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
Drip torch fuel mixtures (diesel/gasoline) used for implementation of prescribed fire will be pre-mixed off site, typically at the local CAL FIRE Fire Station and brought to the site. Drip torches will be inspected for leaks and put out of service or repaired as needed. Filling of drip torches will occur on level ground away from any drainages that could lead to watercourses.			
SPR HAZ-2 Require Spark Arrestors: This SPR applies only to manual treatment activities and all treatment types	Yes	CAL FIRE Prior-During	CAL FIRE
CAL FIRE chainsaw training course requires and trains employees that chainsaw operations without a spark arrestor is prohibited and the chainsaw is out of service until a spark arrester is installed.			
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types.	Yes	CAL FIRE During	CAL FIRE
SPR HAZ-4 Prohibit Smoking in Vegetated Areas. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
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.	Yes	Prior-During	CAL FIRE
A SPRP will be prepared and all requirements will be adhered to.			
SPR HAZ-6 Comply with Herbicide Application Regulations. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	Prior-During	CAL FIRE
CAL FIRE will comply with all herbicide label directions, applies herbicide per recommendations of a licensed PCA, and complies with laws regarding the transport, storage and disposal of herbicides.			
SPR HAZ-7 Triple Rinse Herbicide Containers. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	Post	CAL FIRE

SPR HAZ-8 Minimize Herbicide Drift to Public Areas. This SPR applies only to herbicide treatment activities and all treatment types.	Yes	During	CAL FIRE
The parameters of SPR HAZ-8 will be employed to minimize drift.			
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.	Yes	Prior-During	CAL FIRE
Signs will be posted per SPR HAZ-9.			
MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials.	Yes	Prior	CAL FIRE
The landowners are not aware of any sites known to have previously used, stored, or disposed of hazards activities.			

EC-10: HYDROLOGY AND WATER QUALITY

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	Impact HYD-1, 3.11	LTS	SPR HYD- 4 SPR AQ- 3 SPR BIO- 4, 5 SPR GEO-4, 6 MM BIO- 3b	Yes	LTS	☒
Class II and III watercourses are present in the project area, but there are few given the general ridgetop location of the project. Forested areas would burn in a patchwork of low and moderate intensity during broadcast burns, which would preserve vegetated islands to capture runoff and sediment. Prescribed fire use would be consistent with the natural fire return interval. Pile burning will not take place adjacent to watercourses (at least 50 ft. away) and will be distributed across the landscape to provide suitable buffer vegetation between piles and watercourses. Therefore, this impact is within the scope of the PEIR analysis and site specific analysis.						

Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	Impact HYD-2, 3.11	LTS	SPR HYD- 1, 4, 5 SPR BIO- 1 SPR GEO- 1, 2, 3, 4, 7, 8 SPR HAZ- 1, 5	Yes	LTS	☒
Tractor and hand piles will be positioned at least 50 ft. from watercourses and tractor use will not occur within WLPZs and ELZs per SPR HYD-4. Equipment will not operate on saturated soils any line construction will be waterbarred upon completion of the burn. Equipment will not be serviced or fueled within ELZs, WLPZs or locations where transport to a watercourse is possible. No significant sediment delivery is expected and this impact is within the scope of the PEIR analysis and site specific analysis.						
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	Impact HYD-3, 3.11	LTS	SPR HYD- 3	No	N/A	☒
This impact does not apply because prescribed herbivory would not be used as a treatment activity on the project site.						
Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides	Impact HYD-4, 3.11	LTS	SPR HYD- 5 SPR BIO- 4 SPR HAZ- 5, 7	Yes	LTS	☒
Herbicides will be applied per the manufacturer's directions and program SPRs will be adhered to.						
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	☒
Treatments (manual, broadcast burning, mechanical) could potentially alter existing drainage patterns by removing some vegetation, however, it is anticipated that drainage patterns will be improved on existing trails and roads. No new roads will be constructed and any constructed dozer line will be water barred to prevent concentration of overland flow. The impact is within the scope of the PEIR analysis and site specific analysis.						
Other Impacts to Hydrology and Water Quality: Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Central Coast Regional Water Quality (Region 3) general waste discharge requirements (GWDR) and waste discharge requirement waiver procedures will be followed if required.			
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE
No new road will be constructed or reconstructed.			
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: This SPR applies to prescribed herbivory treatment activities and all treatment types.	No	N/A	N/A
No prescribed herbivory is 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	Prior-During	CAL FIRE
Class II and III watercourses occur in the project area. WLPZs and ELZs as defined by 14 CCR Section 916.5 will be established around these watercourses. No tractor use will take place within these buffers except at established road crossings where the tractor will not leave the road surface.			
SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: This SPR applies to herbicide treatment activities and all treatment types.	Yes	During	CAL FIRE
Implementation of the measures described in SPR HYD-5 will occur to ensure herbicide use will not impact non-target species.			
SPR HYD-6 Protect Existing Drainage Systems: This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
Damage to drainage infrastructure along roads will be avoided, and any accidental damage will be repaired and restored to pre-existing 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 project occurs on a mix of public and private lands. Treatment activities are consistent with the management plans on the agency owned properties. The project is not located in the Coastal Zone. Local county land use planning and regulation will be adhered to; treatment activities are consistent with local polices and regulations. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact LU-2: Induce Substantial Unplanned Population Growth	Impact LU-2, 3.12	LTS	N/A	No	N/A	☒
Treatments will occur on a day to day operational period and local resources and personnel will be utilized from the local contractors and the local CAL FIRE Unit, San Mateo - Santa Cruz. Short-term increase in personnel will be experienced during the implementation of the project however every evening these resources will leave. The impact is within the scope of the PEIR analysis and site specific analysis.						
Other Impacts related to Land Use and Planning, Population and Housing: Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?				No	N/A	☒

EC-12: NOISE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	Impact NOI-1, 3.13	LTS	SPR NOI- 1, 2, 3, 4, 5, 6 SPR AD- 3	Yes	LTS	☒
Treatments would require heavy, noise-generating equipment. Treatment activities may be heard by sensitive receptors but would occur during daytime hours, which avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. Notification will be posted for recreationalists prior and during treatments. The potential for a substantial short-term increase in ambient noise levels was examined in the PEIR. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	Impact NOI-2, 3.13	LTS	SPR NOI- 1	Yes	LTS	☒
Treatments would involve large trucks hauling crews and heavy equipment to the project site. These haul truck trips would pass by residential receptors and the event of each truck passing by could increase the single event noise levels (SENL). Haul trips associated with the treatment would occur during daytime hours, which avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. The location of the project is in a rural area with predominately recreational and timber harvest land uses. Project activities will be no different than the noise associated with normal activities within the surrounding area. The impact is within the scope of the PEIR analysis and site specific analysis.						
Other Impacts Related to Noise: Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE During	CAL FIRE

Per SPR NOI-1 noise-generating vegetation treatment activities will be limited: - *Monday – Saturday between 7:00 am to 6:00 pm* - *Sunday and federal holidays 9:00 am to 6:00 pm*			
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
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
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.	Yes	CAL FIRE N/A	CAL FIRE
Residential noise-sensitive receptors within 1,500 feet of the project will be notified prior to project initiation. The location of the project is in a rural area with predominately recreation and timber harvest land uses. Project activities will be no different than the noise associated with normal activities within the surrounding area.			

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 treatment project would temporarily restrict access for safety reasons, may degrade scenic resources, and temporarily decrease air quality. The scenic and air quality concerns are addressed with SPRs in the Aesthetic and Air Quality PEIR sections. State Parks and SDSF will post notifications of closures at least 2 weeks prior to activities. The impact is within the scope of the PEIR analysis and site specific analysis.						
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	Prior-During	CAL FIRE State Parks
State Parks and SDSF will post notifications of closures at least 2 weeks prior to activities.			

EC-14: TRANSPORTATION

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact TRAN-1: Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures	Impact TRAN-1, 3.15	LTS	SPR TRAN- 1 SPR AD- 3	Yes	LTS	☒
One public road open to motor vehicular use is present in the project area; other roads leading to the project area will see a temporary minor increase in traffic. The potential temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR. The proposed project would be short-term and temporary increases in traffic related to treatments are within the scope of the activities and impacts addressed in the PEIR. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact TRAN-2: Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, 3.15	LTS	SPR TRAN- 1 SPR AD-3	Yes	LTS	☒
Treatments would not require the construction or alteration of any roadways. However, smoke generated during burning operations potentially could affect visibility along Buzzard Lagoon Rd for short periods of time. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact TRAN-3: Result in a net increase in VMT for the proposed CalVTP	Impact TRAN-3, 3.15	PSU	MM AQ- 1	Yes	PSU	☒
Treatments could temporarily increase vehicle miles traveled (VMT) for a short period as equipment enters the project location. The project is in a rural area utilized primarily for recreation and timber production, VMT will not be significantly greater than what the area experiences from this type of use. This impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP could result in a net increase in VMT. The impact is within the scope of the PEIR analysis and site specific analysis.						
Other Impacts to Transportation: Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?				No	N/A	☒

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. This SPR applies to all treatment activities and treatment types.	Yes	Prior-During	CAL FIRE
Traffic control will be required on Buzzard Lagoon Rd, a rural unpaved public road in the project area, for activities involving mastication broadcast burning and tree felling. CAL FIRE or its contractor will work with the County of Santa Cruz to determine the appropriate permit.			

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	☒
Vegetation treatments would include prescribed burning, which would require an off-site water supply. During prescribed fire operations fire equipment will come equipped with water prior to entering the project location, burn operations are low intensity and use of water is limited to control any control line escapes. The impact is within the scope of the PEIR analysis and site specific analysis.						
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	Impact UTL-2, 3.16	SU	SPR UTIL- 1	Yes	LTS	☒
This impact was identified as potentially significant and unavoidable in the PEIR because biomass hauled offsite could exceed the capacity of existing infrastructure for handling biomass. Off-site biomass generation is proposed with the project if funding is available and if facilities are available for accepting it. The project is not dependent on this option and would not create off-site biomass if either of those possibilities were not available.						

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	☒
Any biomass generated from the proposed treatment that is moved off-site will follow all applicable goals and regulations.						
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.	Yes	Prior	CAL FIRE
Off-site biomass generation is proposed with the project if funding is available and if facilities are available for accepting it. An Organic Waste Disposition Plan will be prepared prior to initiating treatment activities, if off site biomass delivery occurs.			

EC-16: WILDFIRE

	PEIR specific			Project specific		
	Identify location of impact Analysis in the PEIR	Identify impact Significance in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Does the Impact Apply to the project Treatments proposed	Identify Impact Significance for the Treatment Project	No New Impact
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	Impact WIL-1, 3-17	LTS	SPR HAZ-2, 3, 4	Yes	LTS	☒
Increase in exposure to wildfire during implementation of the treatment project was examined in the PEIR. Increased wildfire risk associated with prescribed burning and use of heavy equipment in vegetated areas are within the scope of the activities and impacts addressed in the PEIR. The impact is within the scope of the PEIR analysis and site specific analysis.						

Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	Impact WIL-2, 3-17	LTS	SPR AQ- 3 SPR GEO- 3, 4, 5, 8	Yes	LTS	☒
Potential for post-fire landslides was examined in the PEIR. Prescribed burning will be designed and implemented to be of low to moderate intensity. The impact is within the scope of the PEIR analysis and site specific analysis.						
Other Impacts related to Wildfire: Would the project result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?				No	N/A	☒

EC-17: ADMINISTRATIVE STANDARD PROJECT REQUIREMENTS

	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE would meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
CAL FIRE is the project proponent and Lead Agency.			
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-During	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 the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types.	Yes	CAL FIRE Prior-During	CAL FIRE
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 Prior-During	CAL FIRE
Trash receptacles will not be needed on-site. CAL FIRE staff be advised to remove all trash generated daily. Non-biodegradable flagging will be removed once the project has been completed and is no longer needed to protect the resources.			
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent would post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information would be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	Yes	CAL FIRE Prior-During	CAL FIRE
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

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	N/A	N/A
The project area is not within the Coastal Zone.			

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
- ☐ 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 – **See Attachment D – Soil Report**

☒ 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 prepared prior to burning**

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

☒ Biological review/surveys (EC-5)

- ☒ CNDDB Records Search - **See Attachment C**
- ☒ Biologist Consultation/Notification- **See Attachment C**
- ☒ Water Quality consultation – **See Attachment C**
- ☒ Special Status Species Table (CalVTP Appendix BIO-3) – **See Attachment C**

☐ 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) - **Will be prepared prior to treatment on county road**

☒ Organic waste Disposal Plan (SPR UTIL-1) – **Will be prepared if off-site biomass is generated**

☒ 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) **– Notification will be given prior to mechanical treatments.**

☐ 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