Memo

455 Capitol Mall, Suite 300
Sacramento, CA 95814
916.444.7301

Date: December 2, 2022

To: Matt Abernathy, Resource Conservation District of Santa Cruz County for inclusion in the Last Chance Road Forest Health Project file

From: Ted Thayer and Heather Blair, Ascent Environmental

Subject: Minor Clarification to the Last Chance Road Forest Health Project PSA

The Resource Conservation District of Santa Cruz County (RCD) has discovered the need for a minor clarification and revision to a Standard Project Requirement (SPR)in its Last Chance Road Forest Health Project CEQA documentation and, therefore, is preparing this memorandum to keep in the project records.

The RCD received a California Department of Forestry and Fire Protection (CAL FIRE) Forest Health Grant to implement ecological restoration and shaded fuel break treatments along Last Chance Road in forest stands that were burned during the 2020 CZU Lightning Complex. The RCD evaluated these vegetation treatments for CEQA compliance as later activities covered by the Program Environmental Impact Report (Program EIR) for the California Vegetation Treatment Program (CalVTP), using its Project-Specific Analysis (PSA) checklist. In March of 2022, the RCD completed a PSA and concluded that all proposed treatments were within the scope of the CalVTP Program EIR.

The CalVTP vegetation treatment activities evaluated in the PSA are mechanical treatment, manual treatment, and targeted ground application of herbicides. The implementation timing of these treatments is disclosed in the PSA.

The project description in the PSA indicated that the timing of the Phase I CalVTP treatments would occur between May and August of 2022. As described in Section 2.1 of the PSA, "the timeframe may need to change in the event of delays, such as weather." Based on this timeframe, project-specific implementation of SPR GEO-1 was written to limit work to occur only outside of the wet season (i.e., the first frontal rain system depositing a minimum of 0.25 inch of rain after October 15 through April 15). This language is unintentionally contradictory to the language in the Project Description that allows for the project timeframe to change due to delays. A clarification to SPR GEO-1 is needed to resolve this contradiction and allow for work to occur year-round, albeit during dry conditions, which would expand the period within which work could occur while avoiding impacts that could result from work occurring dung wet conditions. See "Revisions to the PSA," below.

Based on the limited nature of these changes, no change is needed to the Coastal Vegetation Treatment Standards (Appendix F of the PSA).

The analysis in the PSA considered the potential impacts of the project to biological resources and soils (erosion) from operation of mechanical equipment with the implementation of SPR GEO-1, which originally required work to occur outside the "wet season" (i.e., between April 16 and October 14). The refinement of SPR GEO-1, would not result in in additional adverse effects to these resource areas beyond what was analyzed in the PSA, because it would continue to limit mechanical treatments to dry periods between precipitation events. Therefore, there is no new or additional analysis required in the PSA for the clarification SPR GEO-1. This clarification does not constitute a change

to the project and all of the environmental impact conclusions remain the same, so additional review under CEQA Guidelines Sections 15162 or 15164 is not warranted.

Minor Revisions to the PSA

The minor revisions to the PSA text and Appendix A, "Mitigation Monitoring and Reporting Program for the Last Chance Road Forest Health Project" are signified by strikeouts (~~strikeouts~~) where text is removed and by underline (underline) where text is added. The full text of the PSA and Appendix A with these minor revisions is attached to this memo. The PSA and Appendix A reflect the clarifications to SRP GEO-1 as well as the minor clarifications to the process of chipping as a biomass disposal method, which were addressed in a memo-to-file dated September 2022.

CalVTP PROJECT-SPECIFIC ANALYSIS
AND PWP COASTAL VEGETATION TREATMENT STANDARDS

Last Chance Road Forest Health Project

Resource Conservation District of Santa Cruz County
CalVTP Project ID: 2021-17

March 2022

CalVTP PROJECT-SPECIFIC ANALYSIS
AND PWP COASTAL VEGETATION TREATMENT STANDARDS

Last Chance Road Forest Health Project

Project Proponent:

Resource Conservation District of Santa Cruz County
820 Bay Avenue, Suite 136
Capitola, CA 95010

Contact:

Matt Abernathy
Project Manager
408.355.3137

Prepared by:

Ascent Environmental, Inc.
1111 Broadway, Suite 600
Oakland, CA 94607

Contact:

Lily Bostrom
Project Manager
916.661.7751

CalVTP Project ID: 2021-17

March 2022

20210146.01

TABLE OF CONTENTS

Appendices

Figures

Tables

LIST OF ABBREVIATIONS

CAAQS	California ambient air quality standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal IPC	California Invasive Plant Council
CalVTP	California Vegetation Treatment Program
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CVTS	Coastal Vegetation Treatment Standards
dbh	diameter at breast height
DPR	Department of Pesticide Regulation
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
GHG	greenhouse gas
LCP	Local Coastal Program
LTS	less than significant
LTSM	less than significant with mitigation
NA	Not applicable
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NI	No impact
NOA	naturally occurring asbestos
NWIC	Northwest Information Center
PEIR	Program Environmental Impact Report
PSA	Project-Specific Analysis
PSU	potentially significant and unavoidable
PWP	Public Works Plan
RCD	Resource Conservation District of Santa Cruz County

SOD	Sudden Oak Death
SR	State Route
SRA	State Responsibility Area
SU	significant and unavoidable
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
WLPZ	Watercourse and Lake Protection Zones
WUI	wildland-urban interface

CHAPTER 1 PROJECT SUMMARY

1.1 SETTING

Wildfires have taken a considerable toll on many communities across California. Land managers, researchers, and foresters predominantly agree on the factors that have led to recent large-scale fires: limited application of cultural and prescribed burning, a lack of vegetation management, climate change, including successive periods of drought, and extensive development into the wildland-urban interface (WUI). The results of these factors are overstocked forests and surrounding vegetation types at high risk for wildfire ignition.

Vegetation along Last Chance Road exhibits unhealthy forest characteristics that increase its susceptibility to disease and wildfire. The 2020 CZU Lightning Complex burned the majority of the vegetation along Last Chance Road with moderate to high burn severity. After the fire, large amounts of unconsumed, dead and dying trees remained. Post-fire conditions resulted in the loss of canopy cover and herbaceous and woody understory habitat that provided cover for endemic wildlife and led to the proliferation of non-native plant species (e.g., eucalyptus seedlings) in burnt areas. Consequently, there is a degraded habitat and ecosystem function. The resulting dead and dying material increases the fuel loads available for future fires as well as presents hazards and potential obstacles for the ingress and egress of residents living in communities on Last Chance Road. Accordingly, the Resource Conservation District of Santa Cruz County (RCD) and collaborating private landowners propose to implement the Last Chance Road Forest Health Project (proposed project or project), which would treat vegetation to increase safety and improve habitat conditions and ecosystem function of vegetation along Last Chance Road. The location of the project is shown on Figure 1-1.

1.2 CEQA AND COASTAL ACT COMPLIANCE

The Program Environmental Impact Report (PEIR) for the California Vegetation Treatment Program (CalVTP) was certified by the California Board of Forestry and Fire Protection in 2019. It evaluates the potential environmental effects of implementing qualifying vegetation treatments to reduce the risk of wildfire throughout the State Responsibility Area (SRA) in California. It was designed for use by many state and local agencies and special districts to accelerate vegetation treatment project approvals by finding them to be within the scope of the PEIR through the preparation of a Project-Specific Analysis (PSA). The PSA must demonstrate that the proposed activities align with those in the CalVTP, the effects of proposed vegetation treatment were analyzed in the PEIR, and Standard Project Requirements and (SPRs) and Mitigation Measures from the PEIR will be integrated into the treatment to avoid and minimize impacts.

The CalVTP PEIR provides a streamlined mechanism for California Environmental Quality Act (CEQA) compliance for vegetation treatment projects. The RCD's certified Public Works Plan (PWP) is a companion to the CalVTP that provides a streamlined mechanism for Coastal Act compliance within the Coastal Zone of Santa Cruz County through the submittal and approval of Notice of Impending Developments, or NOIDs, for individual projects. The PWP requires adherence to the Coastal Vegetation Treatment Standards (CVTS) approved as part of the PWP and additional information about project design within the Santa Cruz County Coastal Zone. This PSA addresses the components of the CalVTP as required pursuant to CEQA and includes information that responds to the CVTS as required pursuant to the Coastal Act and PWP. The response to the CVTS for the proposed project can be found in Appendix F of this PSA.

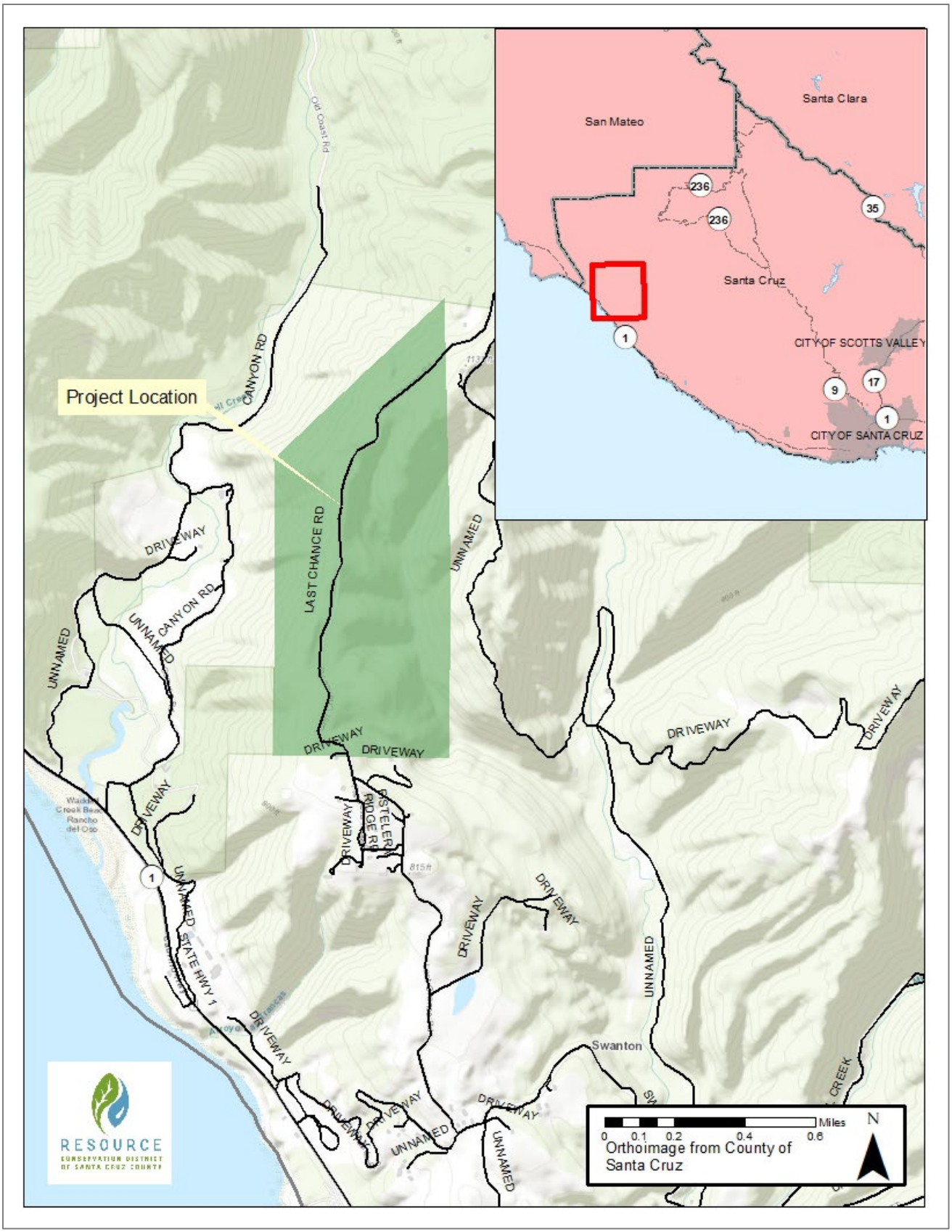
As defined by the CalVTP process, the RCD is the project proponent. For purposes of CEQA compliance, the RCD serves as the responsible agency. The California Coastal Commission is responsible for reviewing the PSA and response to the CVTS, and determining whether the proposed project is consistent with the PWP. Coastal Commission review of a proposed project is deemed complete on the date of a Commission determination that the project is consistent with the PWP.

1.3 LAST CHANCE ROAD

As described above, the 2020 CZU Lightning Complex burned the majority of the vegetation along Last Chance Road with moderate to high burn severity and left behind large amounts of unconsumed, dead and dying trees (see Figures 1-2 through 1-4). The project treatment area was severely burned and overall tree mortality is between 60 and 100 percent in the treatment area. Mortality of Monterey pine (*Pinus radiata*) and Douglas fir (*Pseudotsuga menziesii)* trees in the southern portion of the treatment area is expected to be between 60 and 90 percent. Tree mortality for Monterey pine, Douglas fir, tanoak (*Notholithocarpus densiflorus*), and madrone (*Arbutus menziesii*) in the northern portion of the treatment area is expected to be between 95 and 100 percent. Some larger diameter oak trees will likely survive with a high degree of damage and reduced fitness. Larger diameter Redwoods (*Sequoia sempervirens*) in a small area in the northern portion of the treatment area have a higher likelihood of survival; however, defects are present, such as broken tops and catfaces (i.e., deformities on the surface of a tree trunk caused by fire or disease), and may continue to develop during their recovery. Many redwoods smaller than 12 inches diameter at breast height (dbh) in this area have much lower likelihood of long-term survival. Removing dead, dying, and irreversibly diseased trees would increase growth and carbon storage capacity in the residual stand. As a project funded through a California Department of Forestry and Fire Protection (CAL FIRE) Forest Health Grant and consistent with the objectives of the CalVTP, the primary treatment goal of the project is ecological restoration following the 2020 CZU Lightning Complex.

In addition, the treatment area supports one of three endemic stands of Monterey pine within California, the Ano Nuevo stand, which receives protection under the Coastal Act. Historically, Monterey pine had well defined stands in California, totaling an area of 12,000 to 16,000 acres (Offord 1964). Scott (1960) described the successional sequence in the Ano Nuevo stand in the absence of fire; Douglas fir and coast redwood would likely outcompete Monterey pine for light and space, except on poor soils and on coastally exposed slopes. By 1994, the total remaining natural Monterey pine stands in California were only 6,900 acres, of which, only 1,500 acres remained of the Ano Nuevo stand (Jones and Stokes Associates 1994). The conditions at Last Chance Road prior to 2020 had been predominantly redwood and mixed hardwoods, with Douglas fir rapidly encroaching (see Figure 1-5). However, due to the 2020 CZU Lightning Complex, there has been a high rate of Douglas fir mortality, which has provided the opportunity for Monterey pine seeds present in the seedbank a chance to naturally regenerate. Monterey pines have serotinous cones that only release seeds when exposed to high temperatures. The Ano Nuevo forest repeatedly burned in the early 1900s, but fire has been excluded from this area for nearly a century. Due to fire suppression activities, the health of this stand has greatly degraded and has resulted in a mostly even aged stand, of predominantly old pine, which are more susceptible to disease. Now, the naturally regenerating Monterey pine is opportunistically capitalizing on the mortality of the surrounding vegetation to reoccupy this hillside, increasing the acreage of this endemic species (see Figure 1-6).

Under natural conditions, Monterey pine typically regenerates in a manner that results in a dense carpet of seedlings, the density of which would then be reduced and maintained by fire returning at its natural frequency (Stephens et al., 2004). However, in the absence of fire, or other natural disturbance events, successional saplings require selectively thinning to mimic natural stand density. In addition, treatment of the understory vegetation that would also be reduced naturally by regular fire creates favorable conditions for healthy and resilient Monterey pine forest. Selective thinning during establishment increases the pace of recovery and facilitates restoration of Monterey pine forest by reducing competition for resources amongst Monterey pine seedlings and other regenerating vegetation.



Source: Provided by RCD of Santa Cruz County in 2021

Figure 1-1 Project Location

Source: Photos taken by Ascent Environmental in 2021

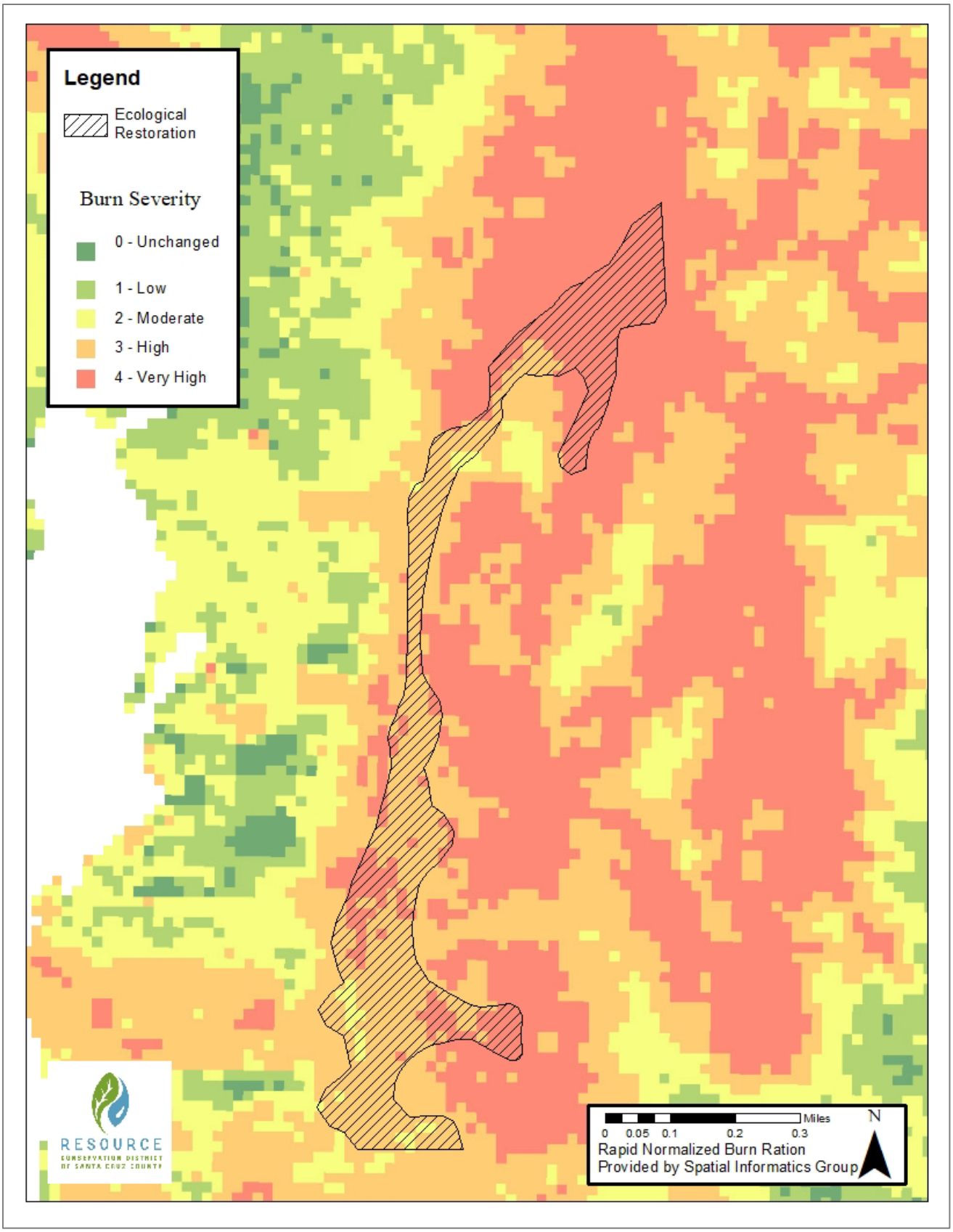
Source: Photos taken by Ascent Environmental in 2021

Figure 1-2 Photographs of the Burned (Existing) Conditions at Last Chance Road Treatment Area

Source: Photos taken by Ascent Environmental in 2021

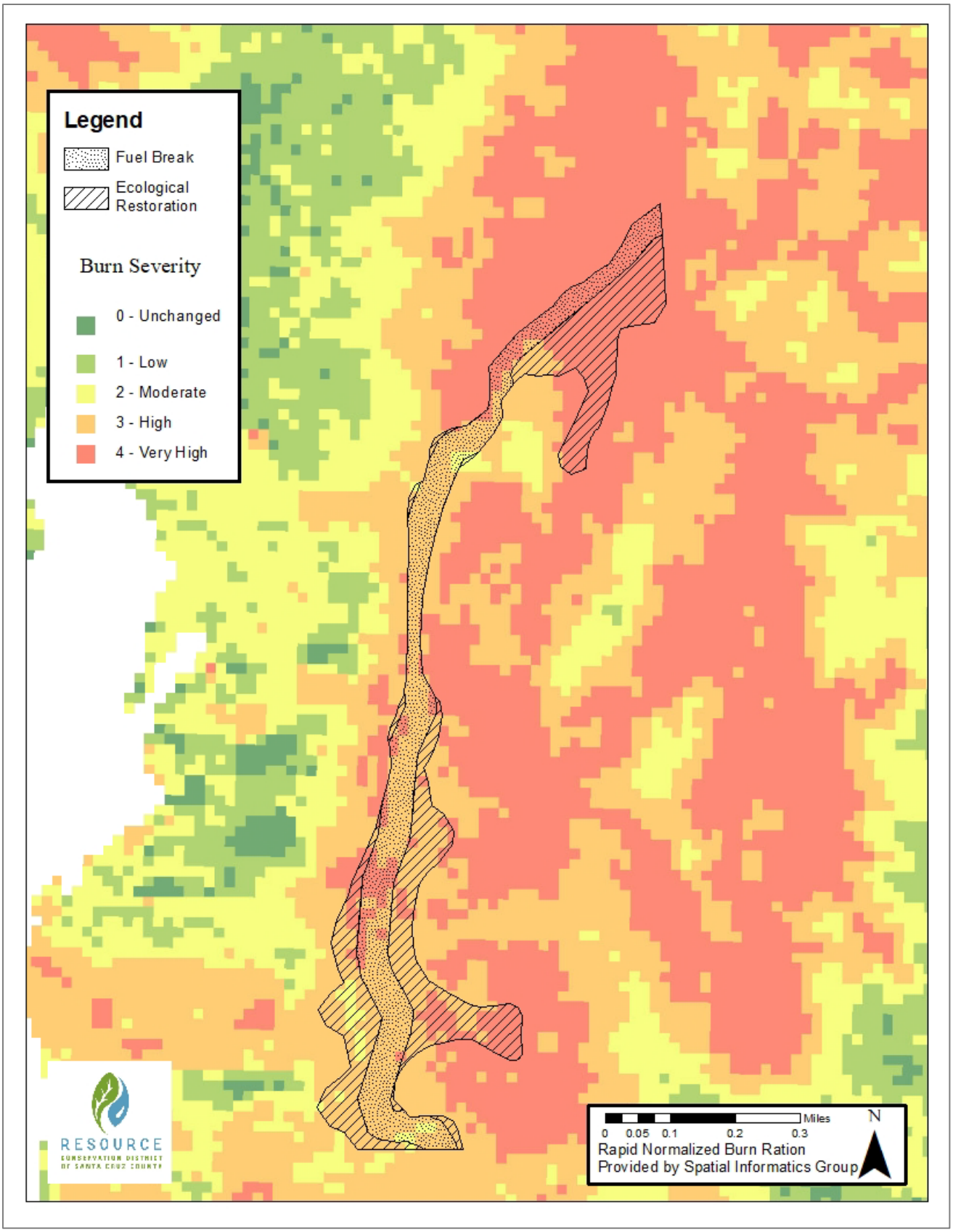
Source: Photos taken by Ascent Environmental in 2021

Figure 1-2 Photographs of the Burned (Existing) Conditions at Last Chance Road Treatment Area (continued)



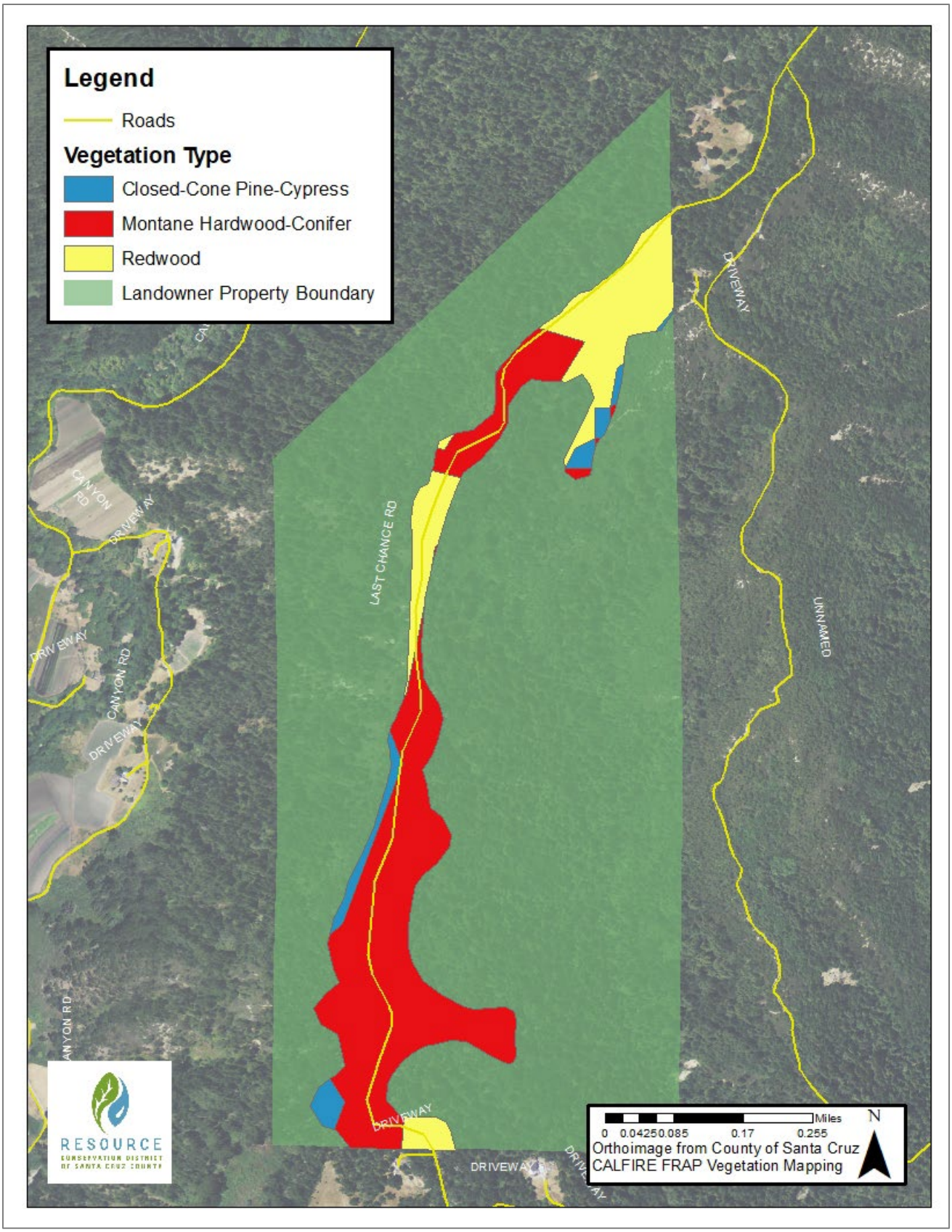
Source: Provided by RCD of Santa Cruz County in 2022 (based on 2020 data downloaded from Spatial Informatics Group)

Figure 1-3 2020 CZU Lightning Complex Burn Severity in the Proposed Phase I Treatment Area



Source: Provided by RCD of Santa Cruz County in 2022 (based on 2020 data downloaded from Spatial Informatics Group)

Figure 1-4 2020 CZU Lightning Complex Burn Severity in the Proposed Phase II Treatment Area



Source: Provided by RCD of Santa Cruz County in 2022 (based on 2020 FRAP data)

Figure 1-5 Vegetation in the Proposed Treatment Area Prior to the 2020 CZU Lightning Complex

The project has two phases; Phase I of the project would focus on ecological restoration through mechanized removal of trees that are a public safety hazard, dead or dying trees, irreversibly diseased trees, severely damaged trees, or invasive plant species. In phase II of the project, the RCD would treat successional vegetation (i.e., naturally regenerating Monterey pine, understory fuels, and persistent invasive species) to facilitate ecosystem processes, conditions, and resiliency, and implement a 27-acre shaded fuel break treatment along Last Chance Road.

Phase I treatments would be implemented using mechanical treatment methods, including a feller-buncher and skid steer, to remove dead, dying, and irreversibly diseased trees. Removing dead and dying vegetation would encourage native vegetative species regeneration and improve habitat conditions including, but not limited to, habitat quality. Through the removal of vegetation, the Phase I ecological restoration treatments would increase the site's carrying capacity for stand volume, which in turn would increase the growth and vigor of any remaining live trees.

Phase II implementation will be informed by the monitoring of Phase I, following the progression of the regeneration. During Phase II ecological treatments, the project proponent would treat the naturally regenerating Monterey pine, successional understory fuels, and invasive species throughout the treatment area to enhance ecosystem processes, conditions, and resiliency. This is consistent with the description of the CalVTP ecological restoration treatment type. Implementing the treatments would result in ideal conditions for growth of the endemic Monterey pine, while modifying fuels to support the natural regeneration of other native vegetation species, and improve habitat quality. Phase II ecological restoration would be implemented using manual and mechanical treatments, including chainsaws, masticators, and chippers. Targeted application of herbicides may also be used to prevent the growth of or remove invasive vegetation. As stand densities vary greatly in the remaining native stands, the performance standard for post-treatment conditions will focus on healthy, mature native Monterey pine stands, with few to no interlocking crowns, and a managed understory with minimal ladder fuels (McDonald and Laacke 1990).

In Phase II, the project proponent would also create a 27-acre shaded fuel break treatment along Last Chance Road that would prevent or slow the spread of future wildland fires to structures and surrounding natural resources. The shaded fuel break would provide emergency responders an opportunity to control or contain wildfires through the modification of flammable vegetation while supporting a healthy and fire resilient residual forest stand through retaining overstory canopy to provide shade that will reduce the potential for rapid re-growth of understory vegetation. The area within which the shaded fuel break would be created was also burned in the 2020 CZU Lightning Complex. Dead, dying, and hazard trees would be removed from this area during Phase I of treatment. In Phase II, successional vegetation along the road would be managed as it establishes to facilitate the selective growth of certain vegetation that would comprise a shaded fuel break. The creation of this shaded fuel break would be implemented using manual and mechanical treatment activities, including equipment such as chainsaws, masticators, and chippers. Targeted application of herbicides may also be used to prevent the growth of invasive vegetation where necessary to achieve the goals of the treatment.

Source: Photos taken by Ascent Environmental in 2021

Figure 1-6 Photographs of Regeneration in the Last Chance Road Treatment Area

Source: Photos taken by Ascent Environmental in 2021

Source: Photos taken by Ascent Environmental in 20201

Figure 1-6 Photographs of Regeneration in the Last Chance Road Treatment Area (continued)

The project was designed to be both cost-effective and to avoid and minimize resource impacts. Manual treatments (i.e., handwork) would be utilized in areas where sensitive resources are identified; however, mechanical treatments are needed throughout most of the treatment area during Phase I of the project in consideration of safety, cost, and efficiency factors. Meeting the State's goals to increase the pace and scale of forest health treatment in response to current climatic conditions requires balancing all available tools and techniques in consideration of safety, cost, available workforce, efficiency, and environmental factors. These conditions require the use of mechanized operations in certain locations identified through resource analysis and qualified professional evaluation to meet the goals of this project.

1.3.1 Project Justification

Through a collaborative effort between the RCD, CAL FIRE, consulting local Registered Professional Foresters, and property owners, the condition of the treatment area prior to the 2020 CZU Lightening Complex was evaluated and determined to have important forest health impairments and hazardous conditions that could lead to catastrophic fires that could further degrade the forest's health as well as pose threats to emergency ingress and egress for the community on Last Chance Road. Following the 2020 CZU Lightning Complex, site conditions were greatly impaired, and the varied burn severity caused an array of mortality that has resulted in new conditions that are primed for future fire as well as potential fall hazards from remaining damaged trees (see Figures 1-2 through 1-4).These impairments occur throughout the forested lands within the burned area; the area of focus for this effort is along Last Chance Road, which is the only ingress and egress route available for communities that live on Last Chance Road.

Extensive planning went into this project to develop ecologically restorative treatments over 60 acres as well as the creation of a shaded fuel break to prevent or slow the spread of future wildland fires and provide emergency responders an opportunity to control or contain wildfires. The Last Chance Road treatment area development phase began by analyzing where sensitive resource areas were located (e.g., watercourses, steep slopes, sensitive communities/species, etc.). These areas were initially mapped out until the more treatable ground (e.g., less steep, ridges, and areas away from watercourses, etc.) could be field verified for access, to evaluate the level of impaired forest condition, and consider treatment options. Once this step was complete, the field-verified treatment polygon was created with vegetation treatments that are economically viable and ecologically restorative, while also promoting community protection to the residents on Last Chance Road.

There are many more acres along Last Chance Road and in the rest of the Santa Cruz Mountains that would benefit from the treatments described in this PSA. Given resource limitations, collaborative landscape-scale prioritization is needed to immediately advance wildfire resilience. Prioritization of treatment areas occurred for Last Chance Road to balance needed ecologically restorative treatments, protection of sensitive resources, reduction of fuels for community protection, worker safety, and economic feasibility of project planning, permitting, and implementation.

Standard Project Requirements (SPRs) are resource protection measures identified in this PSA to provide avoidance and minimization of potential adverse effects. Measures include: biological and botanical surveys, bird nesting surveys (if operations occur from February 1st to August 31st), mechanized operations only on slopes less than 50 percent, no heavy equipment operations in proximity to a watercourse, canopy and native vegetation retention requirements, control of invasive species, specific measures to reduce the spread of forest pathogens such as sudden oak death, preparation of an archaeological survey report, requirements to follow local policies and provide public noticing, and a pre-operational training with the contractors to advise them of resource issues.

CHAPTER 2 PROJECT DESCRIPTION

The Last Chance Road Forest Health Project (project or proposed project) consists of vegetation treatments in the vicinity of Last Chance Road, immediately east of State Route (SR) 1 and approximately 22 miles southeast of the community of Pescadero and 21 miles northwest of the City of Santa Cruz (refer to Figure 1-1). The CalVTP treatments would occur within a 60-acre treatment area in Santa Cruz County. The vegetation treatments are intended to reduce potential vegetative ignition sources, improve the forest's health and vigor, and improve the capacity for emergency response and wildfire suppression during a wildfire.

The CalVTP treatment types that would be implemented are ecological restoration and a shaded fuel break, and the proposed treatment activities to implement the project are manual and mechanical treatments and herbicide application.

As described under Section 1.3.2, "Goal Statement" above, the proposed project is within the CZU Lightning Complex burn area and tree mortality in the treatment area varies between 60 and 100 percent depending on the species. Thus, the project has two distinct phases, the first phase would focus on the removal of trees that are a public safety hazard, dead or dying, irreversibly diseased, severely damaged, or and invasive species. Phase II would treat successional vegetation (i.e., naturally regenerating Monterey pine, future understory fuels, and invasive species) to improve ecosystem processes, conditions, and resiliency, as well as implement a 27-acre shaded fuel break treatment along Last Chance Road. Each phase of the proposed project is described in more detail below.

2.1 PHASE I CalVTP TREATMENT TYPES

The proposed Phase I CalVTP treatments would occur throughout the entire 60-acre treatment area. The Phase I treatment area is shown in Figure 2-1 and the CalVTP treatment type and activities that would be used to implement Phase I are summarized in Table 2-1.

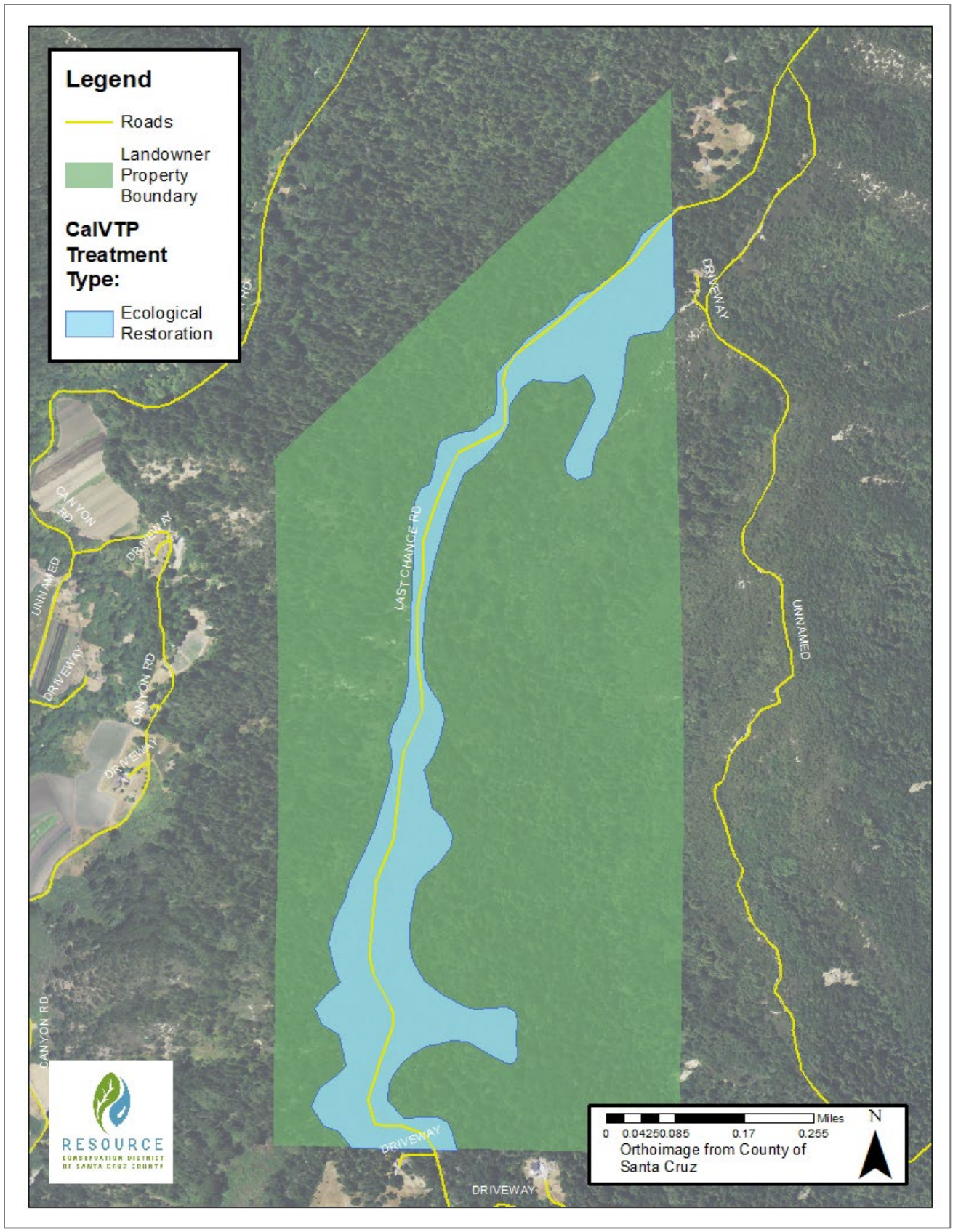
Table 2-1 Proposed Phase I CalVTP Treatments

CalVTP Treatment Type	Treatment Description	CalVTP Treatment Activity	Treatment Size (acres)	Equipment Used for Treatments	Timing of CalVTP Treatments
Ecological Restoration	Habitat improvement/fire resiliency treatments	Mechanical (cutting, limbing)	60	Feller buncher, skid steer, chipper (for chipping biomass)	~~May 2022 – August 2022~~ Year round.
Total Acres			60		

Source: Provided by RCD of Santa Cruz County in 2021

A feller buncher and skid steer would be used to remove dead or downed material; hazard trees; dead, dying, or irreversibly diseased trees; and understory vegetation if appropriate. Trees removed would be limbed and topped, and boles (i.e., tree trunks) would be decked in the treatment area in strategic locations away from the road to reduce visibility from the road and fire fuel hazards along roadways. The CalVTP treatment activities that would be used to implement these treatment types are described in more detail below in Section 2.3, "CalVTP Treatment Activities."

Initial treatments are estimated to occur over approximately 40 days, beginning in May 2022. However, the timeframe may change in the event of delays, such as weather. Treatment crews would consist of up to 10 people working at any one time. Treatment vehicle and equipment staging would occur within the designated treatment area and within pullouts along Last Chance Road. All work would occur during daytime hours.



Source: Provided by RCD of Santa Cruz County in 2021

Figure 2-1 Phase I CalVTP Treatments

2.1.1 Phase I Ecological Restoration

The vegetation treatment area has experienced a range of burn severities, from low to high, during the 2020 CZU Lightning Complex. The proposed project would implement ecological restoration treatments for the dual purpose of wildfire risk reduction and enhancement of natural habitats, particularly given the burned condition of much of the landscape. Consistent with the CalVTP ecological restoration treatment type, the proposed ecological restoration treatments would seek to return the landscape closer to conditions where natural fire processes can be re-established and habitat quality can be improved, including controlling and eliminating nonnative, invasive plants and excess buildup of fire fuel. Specific restoration objectives include improving the natural ecosystem processes, conditions, and resiliency through the removal of the degrading overstory of standing dead, dying, and irreversibly diseased woody vegetation and any present invasive species.

Ecological restoration treatments would occur over the full 60-acre treatment area and would be implemented using mechanical treatment methods, including equipment such as feller bunchers and skid steers to remove dead, dying, and irreversibly diseased trees and invasive species. Implementing ecological restoration treatments would result in a modification of existing fuels that would provide ideal conditions for the natural recruitment of Monterey pine, while reducing fuel loads to protect the regeneration of native vegetation and improve habitat conditions including, but not limited, to habitat quality. Ecological restoration treatments would focus on removing dead, dying, and irreversibly diseased vegetation and some understory vegetation to increase the site's carrying capacity for stand volume, which in turn would increase the growth and vigor of any remaining live trees (Skovsgaad 2009).

Prior to the 2020 CZU Lightning Complex, the forest conditions allowed for Douglas fir to encroach the majority of the property, creating dense vegetation that degraded the forest's health and reduced its ecosystem function. Following the fire, the naturally regenerating Monterey pine has an opportunity to reoccupy this property. However, the excessive buildup of dead and dying material has created unfavorable and hazardous conditions. Removing dead, dying, and irreversibly diseased trees is expected to increase the growth and carbon storage capacity in the residual stand, and allow the Monterey pine to become the dominant vegetation by growing an endemic stand.

2.2 PHASE II CalVTP TREATMENT TYPES

The proposed Phase II CalVTP treatments would also occur throughout the entire 60-acre treatment area. The Phase II treatment area is shown in Figure 2-2 and the CalVTP treatment types and activities that would be used to implement Phase II are summarized in Table 2-2.

Table 2-2 Proposed Phase II CalVTP Treatments

CalVTP Treatment Type	Treatment Description	CalVTP Treatment Activity	Treatment Size (acres)	Equipment Used for Treatments	Timing of CalVTP Treatments
Ecological Restoration	Habitat improvement/fire resiliency treatments	Manual, mechanical, herbicide use (cutting, masticating, cut stump or foliar spray of herbicides	33	Chainsaws and/ or other mechanized hand tools, masticator, chipper, herbicide applicator	2-5 years after Phase I
Shaded Fuel Break	Treatment of heavy brush along Last Chance Road	Manual, mechanical, herbicide use (cutting, masticating, cut stump or foliar spray of herbicides, biomass chipping)	27	Masticator, chipper, chainsaws, herbicide applicator	2-5 years after Phase I
Total Acres			60		

Source: Provided by RCD of Santa Cruz County in 2021

A masticator (mulcher) would be utilized to remove understory vegetation; dead or downed material; hazard trees; dead, dying, and irreversibly diseased trees; and thin live trees up to 8 inches diameter at breast height (dbh) where tree density is too high. Manual treatment crews would utilize chainsaws and/or other various hand mechanized or hand tools to prune trees and woody vegetation; buck downed debris and materials; and to remove dead, dying, and irreversibly

diseased trees of any diameter, and live trees up to 8 inches dbh. Herbicide application may be utilized to eliminate the spread and re-sprouting of invasive species in the treatment areas predominately along roads and trails. The CalVTP treatment activities that would be used are described in more detail below in Section 2.3, "CalVTP Treatment Activities."

The timeframe for implementation of Phase II is dependent on securing future funds and the rate of vegetative regeneration but would likely occur within two to five years after completion of Phase I treatments. The treatment area would be monitored after implementation of Phase I treatments to determine when Phase II treatments would benefit the area, and to confirm that site conditions and the analysis in this PSA are still relevant. Treatment crews would consist of up to 10 people working onsite at any one time. Treatment vehicle and equipment staging would occur within the designated treatments areas and within pullouts along Last Chance Road. All work would occur during daytime hours.

2.2.1 Phase II Ecological Restoration

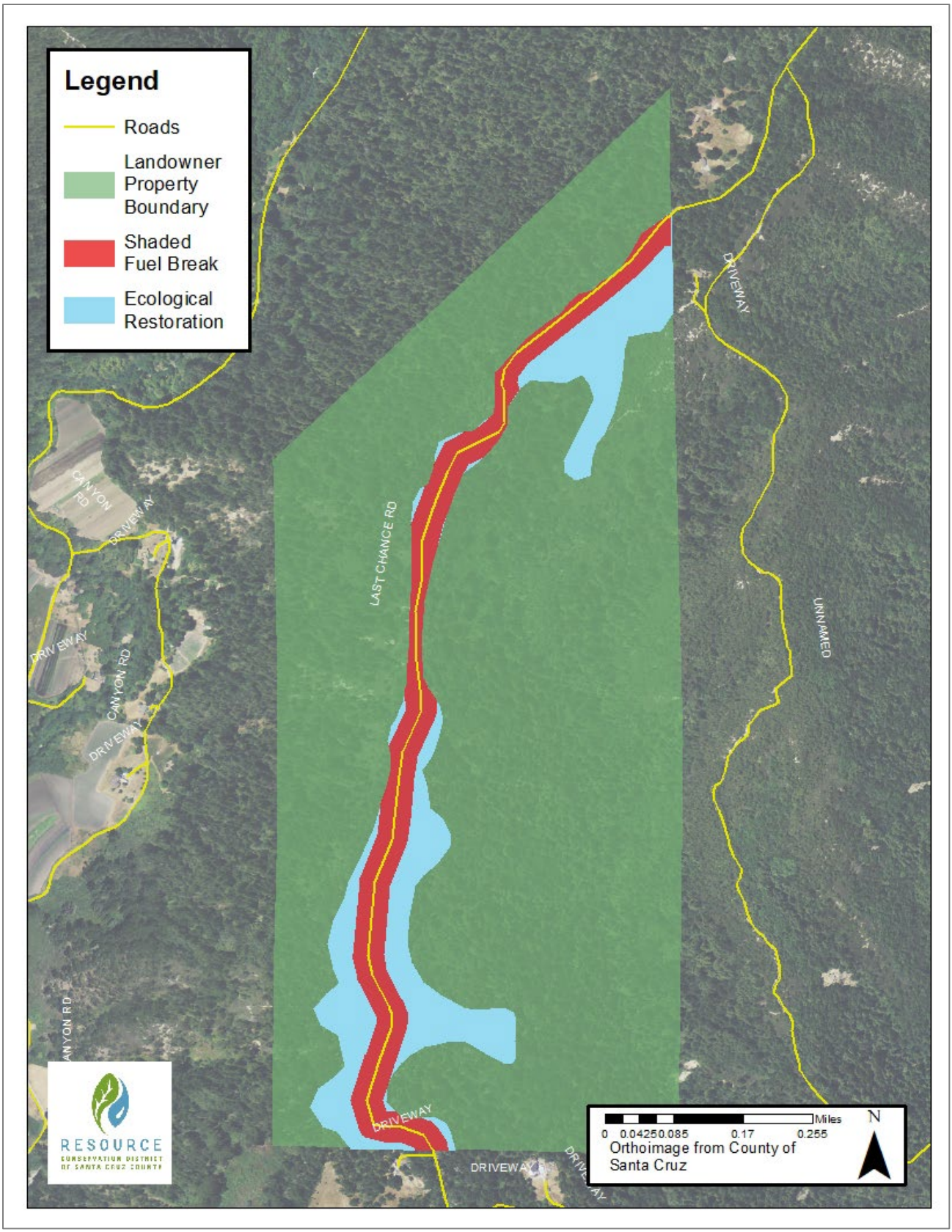
As the second phase of treatment, the project proponent would treat the naturally regenerating Monterey pine, successional understory fuels, and invasive species throughout the treatment area to enhance the ecosystem processes, conditions, and resiliency, and to create healthy tree densities and increase survivorship within a 33-acre portion of the treatment area. This is consistent with the description of the CalVTP ecological restoration treatment type, as defined in the PEIR (CalVTP Final PEIR Volume II page 2-7 and pages 2- 15 and 2-16). Implementing the treatment activities would encourage ideal growing conditions for the endemic Monterey pine and would modify understory vegetation densities to provide improved habitat conditions.

The treatment area supports one of three endemic stands of Monterey pine within California. Before the 2020 CZU Lightning Complex Fire, encroaching Douglas fir was inhibiting seedling growth and natural regeneration of the Monterey pine stand. Following the CZU Lightning Complex Fire, the existing Monterey pine seedbank was given an opportunity to reoccupy this hillside. Monterey pine cones are serotinous, requiring heat to release the seeds. Typically, and under natural a fire return regime, Monterey pine regenerates in a manner that results in overstocking. In the absence of fire, or other natural disturbance event, successional saplings require selectively thinning within the stand and treatment of the understory vegetation to mimic natural low-severity, ground fires that would create ideal vegetation density to create favorable conditions for Monterey pine forest conditions.

As stand densities vary greatly in the remaining native stands, the performance standard for post-treatment conditions will focus on healthy, mature native Monterey pine stands, with few to no interlocking crowns, and a managed understory with minimal ladder fuels (McDonald and Laacke 1990). Ecological restoration would be implemented using manual and mechanical treatment activities, including equipment such as chainsaws, masticators, and chippers. Herbicides may also be used to prevent the growth of or remove invasive vegetation.

2.2.2 Phase II Shaded Fuel Break

This project also proposes to create a 27-acre shaded fuel break treatment along Last Chance Road that would prevent or slow the spread of future wildland fires to structures and surrounding natural resources (see Figure 2-2). As defined in the CalVTP PEIR, fuel breaks remove zones of vegetation to support fire suppression efforts and passively interrupt the path of a fire (CalVTP Final PEIR Volume II Section 2.5.1 page 7 and page 11-14). The shaded fuel break would provide emergency responders an opportunity to control or contain wildfires through the modification of flammable vegetation while supporting a healthy and fire resilient residual forest stand through retaining the majority of the overstory canopy to maintain the shade that would reduce the potential for rapid re-growth of understory vegetation. The area within which the shaded fuel break would be created was burned in the CZU Lightning Complex Fire. Dead, dying, and hazard trees would be removed from this area in Phase I of treatment. In Phase II, successional vegetation along the road would be managed as it establishes to facilitate the selective growth of certain vegetation that would comprise a shaded fuel break. The creation of this shaded fuel break would be implemented using manual and mechanical treatment activities, including equipment such as chainsaws, masticators, and chippers. Herbicides may also be used to prevent the growth of invasive vegetation.



Source: Provided by RCD of Santa Cruz County in 2021

Figure 2-2 Phase II CalVTP Treatments

2.3 CalVTP TREATMENT ACTIVITIES

Mechanical treatment activities would be implemented in Phase I. Mechanical, manual, and herbicide treatment activities would be implemented for Phase II. Each of these activities are described in more detail below; phases are not distinguished in the descriptions below because the activities would be the same for both phases, as applicable.

2.3.1 Mechanical Vegetation Treatment – Phase I and II

Mechanical treatments would occur on up to the full 60 acres proposed for treatment and would primarily include skidding, masticating, and chipping target vegetation. Mechanical treatment activities would occur predominately on slopes less than 40 percent, along ridges, and potentially also on slopes greater than 40 percent by using equipment that can reach target vegetation from existing road infrastructure. Masticators would be used to remove dense stands of understory vegetation and ladder fuels and maintain a healthy overstory. As stated in the CalVTP PEIR Section 2.5.2, mechanical treatments may cut, uproot, crush/compact, or chop existing vegetation through the use of masticators and other methods of application. Understory vegetation, brush, and shrubs under the drip lines of trees shall be cut and masticated leaving root systems intact for resprouting. Understory debris would be chipped and scattered onsite within the treated areas, following best management practices for reducing the spread of pests, disease, and invasive species (see Section 2.6, "Pests, Disease, and Invasive Species" below).

Generally, treatments would:

- remove dead and dying vegetation;
- remove invasive trees, all sizes (e.g., Eucalyptus);
- remove or masticate target vegetation 8 inches dbh or less;
- retain native live vegetation greater or equal to 8 inches dbh;
- retain logs greater than 12 inches with preference for retaining the largest logs and those with cavities, for a total of an average of approximately 10 tons per acre. For Douglas fir 12 inches dbh, 10 tons is approximately 29 whole downed trees per acre, and for Douglas fir 24 inches dbh, 10 tons is approximately five whole down trees per acre;
- retain snags greater than 12 inches dbh at an average density of 1-2 per acre. Preference will be given to retaining the largest trees and trees with cavities, that are not hazard trees;
- To maintain sufficient upland and dispersal habitat for California red-legged frog, the retention of downed woody debris and large snags with cavities will be maximized to the greatest extent possible while still meeting project objectives to create opportunities for emergency responders to control or contain wildfires; and restore natural ecosystem processes, conditions, and resilience through the removal of targeted dense understory fuels and invasive species;
- retain herbaceous vegetation, except for targeted nonnative plant species, in a mosaic pattern in forest and shrub communities;
- retain riparian species (e.g., elderberry); and
- in forested habitat, retain native shrubs with 25-50 feet of space between crowns, where shrub crown is approximately 10-15 feet wide. Spacing may be closer than 25 feet on level ground as needed to maintain the defined membership rules of existing vegetation alliances, and greater than 50 feet on steeper ground to mitigate extreme wildfire behavior, or near structures for structure protection.

2.3.2 Manual Vegetation Treatment – Phase II

Manual treatments would be implemented on at least 10 acres and could be used on up to the full 60 acres (i.e., where manual and mechanical treatments would be used in combination). To implement manual treatments, hand tools and hand-operated power tools, including chainsaws, would be used to cut, clear, or prune herbaceous or

woody species and ladder fuels. Manual treatments would occur predominately on slopes less than 40 percent; however, some manual treatments would occur on steep sleeps between approximately 40-50 percent. The same general guidelines for tree and vegetation removal and retention would be followed as described above for mechanical treatments.

2.3.3 Herbicide Application – Phase II

Herbicides would be used as a potential ongoing maintenance tool to control invasive species and could be used within the entire 60-acre treatment area. Following best management practices for invasive species, specifically French broom (*Genista monsperssulana*), herbicides may be applied when manual removal methods are not a viable or effective option. Consistent with the CalVTP (CalVTP Final PEIR Volume II Section 2.5.2 page 2-27 to 2-28), the herbicides proposed for use are glyphosate and triclopyr and would only be applied directly by hand via cut stump treating or targeted foliar spray on monoculture stands. Herbicide application would comply with the U.S. Environmental Protection Agency (EPA) label directions, as well as California Environmental Protection Agency and Department of Pesticide Regulation (DPR) label standards. In addition, both glyphosate and triclopyr are subject to the California Red-Legged Frog Injunction (Center for Biological Diversity v. U.S. EPA [2006] Case No. 02-1580-JSW), and therefore, specific application requirements apply. For localized spot treatments using handheld devices on roadsides and in forests, the application of glyphosate and triclopyr are prohibited within 60 feet of California red-legged frog aquatic breeding critical habitat or non-breeding aquatic critical habitat within critical habitat areas or within 60 feet of aquatic features within the non-critical habitat sections subject to the injunction (EPA 2021). The RCD would comply with all laws and regulations governing the use of herbicides.

2.4 BIOMASS DISPOSAL

~~After treatment, some~~ All biomass would remain onsite as decked logs, ~~other biomass~~ or would be disposed of through mastication of material, chipping, ~~and in some locations,~~ and lopping and scattering; all biomass would remain onsite. Chipped and masticated biomass ~~Chipping locations~~ would be placed onto ~~prioritized at~~ previously disturbed sites, such as roads and trails, and as groundcover to prevent soil erosion. Remaining chips would be used in staging areas and may be spread in the treatment area, if needed. ~~Chips would not exceed 4 inches in depth in any area.~~ Where placement of chipped and masticated material onto disturbed areas is not feasible, chipped and masticated biomass may be spread onto other areas such that the depth of chips is as shallow as possible and not to exceed 4 inches.

2.4.1 Phase I Biomass Disposal

The proposed mechanical vegetation treatments that would occur during Phase I would limb and top large woody vegetation, chipping and lopping and scattering the removed material and decking the boles (i.e., stacking the tree trunks). Chips would be distributed ~~according to the priority hierarchy listed~~ as described above~~, and would not be placed in waters of the State, Waters of the U.S., or other sensitive habitats~~. Decked boles would be located within the treatment area and in strategic locations away from the road to minimize visibility. The landowner would process the boles in the future.

2.4.2 Phase II Biomass Disposal

The proposed Phase II mechanical vegetation treatments would mulch much of the vegetative debris using masticators and place it on the ground concurrently with vegetation removal. Biomass generated from treatments would primarily be disposed of by chipping and spreading on site (95 percent of biomass). Chipped biomass would be distributed ~~according to the priority hierarchy listed~~ as described above~~, and would not be placed in waters of the State, Waters of the U.S., or other sensitive habitats~~. The remaining biomass (approximately 5 percent) would be lopped and scattered within the treatment areas.

2.5 TREATMENT MAINTENANCE

Following Phase I initial treatment, site conditions are expected to resemble a meadow-like setting, with recovering vegetation returning following the 2020 CZU Lightning Complex, allowing space for the naturally regenerating Monterey pine to acquire available nutrients, water, and sunlight. Following Phase II implementation, site conditions are expected to have a clear, open understory, free of ladder fuels, with adequate spacing between the individual Monterey pines that would promote a healthier, more vigorous forest. An open understory would create a mosaic of fuel continuity that would support wildlife habitats and the regeneration of native species. Maintenance intervals would be dependent on the re-establishment rate of the understory species and would be triggered by the occurrence of dense, continuous understory and ladder fuels, which will be identified during ongoing monitoring by the RCD and would be adaptively managed.

Maintenance treatments would be conducted through the implementation of mechanical and manual treatments to treat hazard trees, understory vegetation and ladder fuels, and reduce the re-establishment of invasive species. Herbicides may also be used to treat invasive species if needed, as described under Section 2.3.3, "Herbicide Application – Phase II" above. All maintenance treatments would occur during daytime hours.

All maintenance treatments implemented under this PSA will be supervised and overseen by the project proponent. Periodic maintenance is expected to occur as needed, determined by qualified RCD staff who would monitor the project over the lifetime of this PSA, in compliance with Item #18 in Chapter 3 of this PSA. When implementing future maintenance treatments, the collaborating landowner would be required to implement treatments consistent with this PSA, CVTS, and the mitigation measures and SPRs in the Mitigation Monitoring and Reporting Program (MMRP) if they are using the PWP for Coastal Act compliance. In this circumstance, the RCD will be responsible for ensuring that the treatments conducted by the landowner are implemented consistent with all applicable SPRs and mitigation measures and reporting and coordination is completed pursuant to the RCD's obligations under the PWP.

2.6 PESTS, DISEASE, AND INVASIVE SPECIES

The pathogen, *Phytophthora ramorum*, commonly referred to as Sudden Oak Death (SOD), infects coastal forests throughout California and Oregon and kills susceptible species including tanoak, coast live oak, California black oak, Shreve's oak, canyon live oak, and madrone saplings. Host species that are in the treatment area include, but are not limited to California bay laurel, coast redwood, and Douglas fir. In addition to applicable CalVTP SPRs and mitigation measures that would be implemented, and to avoid the spread of this pathogen, all hand equipment and boots worn by treatment crews would be sanitized and heavy equipment hosed off before operations in areas where the spread of SOD is possible. The California Oak Mortality Task Force website contains additional information regarding treatment and disposal measures for plants infected with SOD, which would be monitored for changes in SOD treatment recommendations (http://www.suddenoakdeath.org/).

The fungal disease, *Fusarium circunatum*, commonly referred to as Pitch canker, affects many pine species and can infect Douglas fir. Most pines native to California are susceptible to pitch canker, but Monterey pine is the most widely affected host. In addition to applicable CalVTP SPRs and mitigation measures that would be implemented, and to avoid the spread of this pathogen, the same measures as described above to prevent the spread of SOD would be implemented. The Pitch Canker Task Force has additional information regarding treatment and guidelines for handling woody material infected by pitch canker fungus, which would be monitored for changes in pitch canker treatment recommendations (https://ufei.calpoly.edu/pitch-canker-task-force/).

French broom is a problematic invasive species due to its ignitability, ability to carry fire into tree canopies, shading out seedlings, and replacing the native plants and forage species. This species has a large seed bank and re-sprouts readily from the root after cutting, freezing, and fire (Cal IPC 2020).The California Invasive Plant Council (Cal IPC) recommends pulling French broom to remove the entire plant including its roots to eliminate re-sprouting. The removal of this species is a priority due to its increased fire hazard, the longevity of its seedbank, and adverse impacts to habitat and aesthetics. Additional information about French broom control and treatments is located on the Cal IPC website, which would be monitored for changes in French broom

treatment recommendations (https://www.calipc.org/plants/profile/genista-monspessulana-profile/ and https://wric.ucdavis.edu/information/natural%20areas/wr_G/Genista.pdf).

SPR BIO-6 would be implemented to prevent the spread of pathogens from areas identified as zones of infestation to non-infested areas. Specific measures include training on plant pathogens during the worker awareness trainings that would occur prior to treatment, minimizing the movement of soil and non-target plant materials (including invasives) during treatments, and cleaning and sanitizing hand tools, boots, clothing, vehicles, and mechanized equipment before arriving at a treatment site, prior to leaving a contaminated treatment site, and when moving from high risk to low risk areas.

This page intentionally left blank.

CHAPTER 3 ENVIRONMENTAL CHECKLIST

VEGETATION TREATMENT PROJECT INFORMATION

1. **Project Title:** Last Chance Road Forest Health Project
2. **CalVTP I.D. Number:** 2021-17
3. **Project Proponent Name and Address:** Resource Conservation District of Santa Cruz County (RCD)
   820 Bay Avenue, Suite 136
   Capitola, CA 95010
4. **Contact Person Information and Phone Number:** Matt Abernathy, Forest Health/Wildfire Resiliency Program Specialist
   Mabernathy@rcdsantacruz.org
   (831) 464-2950 x 28
5. **Project Location:** Last Chance Road, Santa Cruz County, approximately 0.60-mile east of SR 1, accessible from SR 1 via Swanton Road.
   USGS Santa Cruz Quadrangle, California, T9S, R4W
   Latitude (Y): 37.11552
   Longitude (X): -122.25871
   See Figure 1-1
6. **Total Area to be Treated (acres)** Approximately 60 acres
7. **Description of Project**:

See Chapter 2, "Project Description," above for a detailed description of the proposed project.

Problem Statement

California has seen increasing wildfire events of exceptional nature with considerable effects to natural systems, the health and welfare of people, and associated public and private property. Multiple large complex wildfires have occurred in the region, including the 2020 CZU Lightning Complex, 2020 SCU Lightning Complex, and 2020 LNU Lightning Complex. Recent reports suggest that over 3 million acres burned in California in 2021, which exceeds all historic records for California by 1 million acres, except for year 2020 when over 4 million acres burned. Thousands of homes and critical community service support structures for power and water were heavily impacted. The amount of time and money necessary for natural systems to regenerate, communities to rebuild, and public services to be restored will impact these systems and communities for years to come. Most notably for San Mateo and Santa Cruz Counties, the 2020 CZU Lightning Complex burned 86,509 acres, destroyed 1490 buildings, and exhibited extreme fire behavior.

The 2020 CZU Lightning Complex burned through the majority of the Ano Nuevo stand of Monterey pine in Santa Cruz and San Mateo Counties. This is one of five native Monterey pine stands ranging from California to Mexico. Expected mortality rates across the majority of the entire Ano Nuevo stand are expected to be 50 to 100 percent based on burn severity.

Phase I

Due to the 2020 CZU Lightning Complex, there is an extensive amount of vegetative mortality that has resulted in a lack of proper ecosystem function and degraded habitat in the vegetation along Last Chance Road. The resulting dead and dying material increases the fuel loads available for future fires as well as presents fall hazards and potential obstacles for the ingress and egress of communities living on Last Chance Road. Tree mortality for Monterey pine, Douglas-fir, tanoaks, and madrones in the treatment area are expected to be between 60-100 percent. Some larger diameter oak trees will likely survive but with a high degree of damage. A small area of redwoods in the northern portion of the treatment area are expected to show a greater level of survival. This excessive buildup of dead and

dying material following the 2020 CZU Lightning Complex has degraded conditions in the treatment area and presents potential hazards to ingress and egress for residents living on Last Chance Road. Because of this dangerous condition, Santa Cruz County has restricted access along Last Chance Road until conditions have been deemed to be safe; this is preventing the Last Chance community from rebuilding structures lost in the 2020 CZU Lightning Complex. In addition, the 2020 CZU Lightning Complex resulted in the loss of canopy cover and herbaceous and woody understory habitat that provided cover for endemic wildlife. The post-fire increase in sunlight exposure and disturbed soils has also allowed non-native species to begin to colonize the area.

Phase II

As successional vegetation re-establishes after the implementation of Phase I treatments, vegetation management will be needed to remove invasive species that begin to colonize the treatment area and to encourage the growth of the native Monterey pine stand and other desirable species as they re-establish. Without treatment, it is anticipated that re-establishment of Monterey pine, which has been observed to be as high as 2,000 stems per acre in other locations, and other vegetation will result in overly dense, hazardous, and degraded conditions similar to what was present in the treatment area prior to the 2020 CZU Lightning Complex. In addition, vegetation management is needed along Last Chance Road to establish a shaded fuel break that will maintain safe access for the Last Chance Community and prevent or slow the spread of future wildland fires to structures and surrounding natural resources.

Goal Statement

The proposed project is within the 2020 CZU Lightning Complex burn area and the Coastal Zone. It supports the legislative findings and declarations in the Coastal Act (Public Resources Code Section 30001(a)(b)) that the California Coastal Zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem, and that the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation. In addition, project outcomes are consistent with the declaration in Section 30001(c), "[t]hat to promote the public safety, health, and welfare, and to protect public and private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction."

As a project funded through a CAL FIRE Forest Health Grant, this project will facilitate ecological restoration as well as create a shaded fuel break following the 2020 CZU Lightning Complex. The goals of Phase I treatments are to 1) improve the forest's health, enhance ecosystem functions, and promote regeneration of native vegetation, including Monterey pines, by implementing ecological restoration treatments and removing invasive species, and 2) improve public safety by removing hazardous trees that are a threat to public safety, are dead or dying, irreversibly diseased, or severely damaged. The goal of Phase II treatments are to 1) implement ecological restoration treatments to maintain conditions that facilitate re-establishment of Monterey pines, and 2) create a shaded fuel break along Last Chance Road. The shaded fuel break would provide emergency responders an opportunity to control or contain wildfires through the modification of flammable vegetation while supporting a healthy and fire resilient residual forest stand through retaining the majority of the overstory canopy to maintain the shade that will reduce the potential for rapid regrowth of understory vegetation. As stand densities vary greatly in the remaining native stands, the performance standard for post-treatment conditions will focus on healthy, mature native Monterey pine stands, with few to no interlocking crowns, and a managed understory with minimal ladder fuels.

Environmental protections, including SPRs and mitigation measures, would be implemented by the project proponent and reported through the Mitigation Monitoring and Reporting Program developed as part of an approved PSA under the CalVTP PEIR. This project supports the achievement of CAL FIRE's Forest Health Program goals, California's climate goals, and the goals of the CCC for Environmentally Sensitive Habitat Areas (ESHA) where CalVTP ecological restoration treatment types may occur to:

- Proactively restore forest health, improve ecosystem resiliency, and conserve working forests by conducting ecologically minded forest health treatments.
- Protect state water supply sources by strategically implementing ecological restoration projects across priority watersheds.

- Encourage the long-term storage of carbon in forest trees and soils through the reduction of dense understory thus promoting larger healthier stands of mature trees.
- Minimize the loss of forest carbon from large, intense wildfires, through reduction of ladder fuels and brush resulting from years of fire suppression.
- Promote public safety, health, and welfare and protect public and private property through the implementation of ecologically restorative fuel reduction treatments in the WUI.

8. Phase I Treatment Types

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

9. Phase I Treatment Activities

- ☐ Prescribed Burning (Broadcast), _____ acres
- ☐ Prescribed Burning (Pile Burning)
- ☒ Mechanical Treatment, 60 acres
- ☐ Manual Treatment, _____ acres
- ☐ Prescribed Herbivory, _____ acres
- ☐ Herbicide Application, _____ acres

10. Phase I Fuel Type

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

11. Phase 2 Treatment Types

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

12. Phase 2 Treatment Activities

- ☐ Prescribed Burning (Broadcast), _____ acres
- ☐ Prescribed Burning (Pile Burning)
- ☒ Mechanical Treatment, up to 60 acres
- ☒ Manual Treatment, up to 60 acres
- ☐ Prescribed Herbivory, _____ acres
- ☒ Herbicide Application, up to 60 acres

13. Phase 2 Fuel Type

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

14. Geographic Scope

- ☒ The treatment area is entirely within the CalVTP treatable landscape
- ☐ The treatment area is NOT entirely within the CalVTP treatable landscape

15. Regional Setting and Surrounding Land Uses:

The treatment area is located on private property on either side of a portion of Last Chance Road in Santa Cruz County, approximately 11 miles southeast of the city of Pescadero and 15 miles northwest of the city of Santa Cruz. The collaborating landowner is in agreement with the proposed project. The treatment area is accessible from SR 1 via Swanton Road. The vegetation treatment area is near homes and structures, and Last Chance Road within the treatment area is the sole ingress/egress for the Last Chance Community, which includes approximately 100 residents.

The treatment area is on an undeveloped ridgeline with elevations ranging between approximately 800 feet and 1,140 feet above sea level. The vegetation within the Last Chance Road treatment area is comprised of forests dominated by predominately second growth coastal redwood, Douglas-fir, and mixed hardwoods. The understory is comprised of native brush and shrub species, such as huckleberry, poison oak, and manzanita. French broom is a common non-native, invasive species located within the treatment area. Surrounding land uses include undeveloped open space, such as Big Basin Redwoods State Park and Rancho del Oso Horse Camp and Nature Center. Recreational land occurs to the southwest, agricultural land exists to the west and north, and several rural communities or private properties are located to the east and south. Waddell Creek is approximately 0.40-mile downslope and west of the treatment area. Waddell Beach, commercial offices, and SR 1 are all approximately 0.60-mile southwest of the treatment area. The area surrounding the project is primarily forested, although due to the 2020 CZU Lightning Complex, much of the forested areas were burned and are currently comprised of dead or dying trees and susceptible to increased colonization by non-native, invasive species due to ground disturbance and loss of shaded overstory.

16. Other Public Agencies Whose Approval is Required:

The proposed project is within the Coastal Zone, as defined by the California Coastal Act, and described in SPR AD-9 in the CalVTP PEIR (CalVTP Final PEIR Volume II page 2-34), and therefore requires approval by the CCC. Communication and coordination between the CCC, RCD, and the County of Santa Cruz has allowed for the development and certification of a PWP, in lieu of a coastal development permit, through the creation of a set of Coastal Vegetation Treatment Standards (CVTS) (Appendix F). Project approval is subject to the review and issuance of a NOID. The CCC received a draft Last Chance Road Forest Health Project PSA for their review on January 28, 2022. Prior to submitting the PSA, RCD staff conducted a site visit to the Last Chance Road treatment area with CCC staff on January 14, 2022.

CAL FIRE and the County of Santa Cruz also attended site visits to Last Chance Road and received the draft Last Chance Road Forest Health Project PSA for review on January 28, 2022.

The California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) were consulted during the planning phase of this project. Memo's describing the project and measures that are included to avoid and minimize impacts to special-status species and habitat were provided to CDFW and USFWS and are included as Appendix C (CDFW Consultation Memo) and Appendix D (USFWS Consultation Memo) to this PSA. A site visit occurred with USFWS on January 4, 2022, and a conference call with CDFW took place on February 4, 2022.

17. Native American Consultation.

The Board of Forestry and Fire Protection completed consultation pursuant to Public Resources Code Section 21080.3.1 during preparation of the CalVTP PEIR; however, CalVTP SPR CUL-2 includes a requirement for further tribal coordination during PSA preparation. Consistent with CalVTP SPR CUL-2, a list of geographically affiliated Native American representatives was obtained from the Native American Heritage Commission (NAHC) on November 7, 2021. On behalf of the RCD, Ascent sent seven emails on November 9, 2021, and one letter on November 10, 2021, inviting each Native American representative to consult on the project. To date, no responses have been received from any Native American tribes. Refer to Section 4.4, "Archaeological, Historical, and Tribal Cultural Resources," for more information.

18. Use of the PSA for Treatment Maintenance.

The proposed project would include maintenance treatments that will be implemented, as needed, after vegetation re-establishment following the Phase I and Phase II treatments. Maintenance of the areas treated under the proposed project would involve the same vegetation treatment activities used in the original treatment (i.e., manual and mechanical treatments) and would also involve removing invasive plant species (e.g., French broom) and weeds though targeted herbicide application. See Chapter 2, "Treatment Maintenance" and "Herbicide Application – Phase II," for additional details.

Prior to initiating Phase II and maintenance treatments, the project proponent will verify that the site conditions described in the PSA and the analysis in the PSA are still substantially similar to conditions in the field. If the project proponent determines that field conditions have substantially changed to the degree that a new significant or substantially more severe significant environment effect would occur due to the changed site condition and/or proposed treatments, the project proponent would determine whether updates to this PSA, a new PSA, or other environmental analysis is warranted. The project proponent would update the PSA, develop a new PSA, or prepare the appropriate CEQA document at that time.

Separately, the PWP provides Coastal Act compliance for the project, subject to the review and approval of a NOID. The project will be authorized for a minimum of 3 years, with the possibility of being authorized for the life of the PWP (i.e., 10 years from PWP certification). After 10 years, the RCD would work with the CCC to review and amend the PWP, as required, to extend the Coastal Act compliance mechanism, including through the reissuance of a new, or extension of the existing, NOID. Although future treatments would have CEQA coverage through this PSA, the RCD and the collaborating landowner would not implement treatments without complying with the Coastal Act.

19. Standard Project Requirements and Mitigation Measures.

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

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

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

DETERMINATION (To be completed by the project proponent)

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

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

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

☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR or will have effects that are substantially more severe than those covered in the CalVTP PEIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP PEIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent that would avoid or reduce the effects so that clearly no significant effects would occur. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project will have significant environmental effects that are (a) new and were not covered in the CalVTP PEIR and/or (b) substantially more severe than those covered in the CalVTP PEIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Signature	Date
James McKenna	Board President
Printed Name	Title
Resource Conservation District of Santa Cruz County	
Agency	

CHAPTER 4 PROJECT-SPECIFIC ANALYSIS

4.1 AESTHETICS AND VISUAL RESOURCES

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

[1] LTS = less than significant; SU = significant and unavoidable.

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

New Aesthetic and Visual Resource Impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.1.1 Discussion

IMPACT AES-1

Phase I Treatments

The proposed Phase I treatments would be implemented using only mechanical treatments activities. Phase I biomass disposal would consist of chipping materials and decking boles in strategic locations to minimize visibility. These activities could result in short-term degradation of a scenic vista or visual character or quality of public views from the presence of large equipment and vehicles in the treatment area. The potential for these treatment activities to result in short-term degradation of visual character was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.2-16 through 3.2-19). The proposed treatments would occur along an upper portion of Last Chance Road, which may be visible from public hiking trails that are part of Rancho del Oso State Park and Big Basin State Park, providing intermittent ridgeline views of the areas proposed for treatment. In addition, although there are no designated state scenic highways with views of the treatment areas, SR 1 near the treatment area is an eligible state scenic highway and provides views of ridgeline portions of the treatment area in certain locations (Caltrans 2021).

Consistent with the PEIR, the presence of large mechanical equipment could contrast with the natural environment where publicly visible, such as adjacent to a public trail or roadway. However, the visibility of treatment implementation would be temporary and would not dominate a view or block any views from scenic vistas or state scenic highways. It also would not substantially degrade the existing visual character or quality of an area given that the treatment activities would be limited in geographic extent. The potential for the project to result in short-term substantial degradation of the visual character of the treatment area is within the scope of the PEIR, because the proposed treatment activities and types of equipment proposed for use are consistent with those analyzed in the PEIR. SPR AES-2 would be applicable to the proposed project, which requires the project proponent to store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass, which could result in short-term degradation of a scenic vista or visual character or quality of public views from the presence of large equipment and vehicles in the treatment area. The potential short-term impact to scenic vistas and visual character and quality during Phase II is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the Phase II treatment activities and the types of equipment proposed for use during Phase II of the proposed project are consistent with those analyzed in the PEIR. The SPR applicable to this impact is SPR AES-2. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in short-term degradation of a scenic vista or visual character or quality of public views from the presence of large equipment and vehicles in the treatment area. This impact is within the scope of the PEIR because the maintenance treatment activities and the types of equipment proposed for use during maintenance are consistent with those analyzed in the PEIR. The SPR applicable to this impact is SPR AES-2. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT AES-2

Phase I Treatments

Phase I of the proposed project would include only the ecological restoration treatment type. The potential for this treatment type to result in long-term degradation of the visual character of a treatment area was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.2-20 through 3.2-22). Portions of the treatment areas would be publicly visible from recreation areas, such as trails, and from eligible state scenic highways, as described under Impact AES-1. However, consistent with the PEIR, the proposed ecological restoration treatments would seek to return the landscape to a more natural condition. The excessive buildup of dead and dying material following the 2020 CZU Lightning Complex has degraded conditions in the treatment area, including public views of the treatment area, which are currently comprised of dead and dying trees on a ridgeline. Phase I treatments would focus on removing dead or downed material; hazard trees; dead, dying, or irreversibly diseased trees; and understory vegetation, where appropriate. Although the treatments would remove the majority of overstory vegetation and dead and dying material in the treatment area, they would result in a modification of existing fuels that would provide ideal conditions for the natural recruitment of Monterey pine, while reducing fuel loads to protect the regeneration of native vegetation and improve habitat conditions, which would improve public views of the treatment area over the long term, as discussed further under Phase II Treatments, below. Following Phase I initial treatment, site conditions are expected to resemble a meadow-like setting, with recovering vegetation returning following the CZU Lightning Complex Fire. Biomass would be chipped or and select boles would be decked in the treatment area in strategic locations away from the road to reduce visibility. For these reasons, the project would not substantially degrade public views or damage scenic resources in a state scenic highway, and no SPRs are necessary to maintain this impact at less than significant. The potential for the project to result in long-term substantial degradation of the visual character the treatment area is within the scope of the PEIR, because the proposed treatment type and activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Current views of the treatment area are of dead and dying trees on a ridgeline. Implementation of Phase I would remove many of the dead and dying trees from public views. Phase II of the proposed project would be implemented 2-5 years after Phase I and would include ecological restoration and the shaded fuel break treatment types. Portions of the treatment areas would be publicly visible from recreation areas, such as trails, and from eligible state scenic highways, as described under Impact AES-1. In Phase II, the project would treat the naturally regenerating Monterey pine, successional understory fuels, and invasive species to enhance the ecosystem processes, conditions, and resiliency. This is consistent with the description of the CalVTP ecological restoration treatment type, as defined in the PEIR (CalVTP Final PEIR Volume II page 2-7 and pages 2-15 and 2-16). Implementing ecological restoration treatments would encourage ideal growing conditions for the endemic Monterey pine, and would modify understory vegetation densities to provide improved habitat conditions, which would improve views of the treatment area from public locations. In addition, successional vegetation along Last Chance Road would be managed as it establishes to facilitate the selective growth of certain vegetation that would comprise a 27-acre shaded fuel break. Because not all of the existing vegetation would be cleared, and large trees would remain within shaded fuel breaks, vividness, intactness, and unity of views would likely remain high and it is unlikely that they would substantially affect public views. Furthermore, visually dominant trees would remain in place; tree and vegetation removal would be limited to small trees 8 inches dbh or less. Following Phase II implementation, site conditions are expected to have a clear, open understory, free of ladder fuels, with adequate spacing between the individual Monterey pines that would promote a healthier, more vigorous forest. Biomass would either be masticated or chipped and spread within the treatment area, not exceeding 4 inches in thickness. For these reasons, the project would not substantially degrade public views or damage scenic resources in a state scenic highway. The potential for the project to result in long-term substantial degradation of the visual character the treatment area is within the scope of the PEIR, because the proposed treatment type and activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve vegetation treatment to maintain the treatment types implemented during Phase II of the project, as described under "Phase II Treatments," above and would therefore would not substantially alter public views of the treatment area. This impact is within the scope of the PEIR because the maintenance treatments are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT AES-3

This impact does not apply to the proposed project because no non-shaded fuel breaks are proposed during Phase I, Phase II, or maintenance treatments under the proposed project.

NEW AESTHETIC AND VISUAL RESOURCE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.2.1, "Environmental Setting," and Section 3.2.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to aesthetics and visual resources would occur that is not covered in the PEIR.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AG-1: Directly Result in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	LTS	Impact AG-1, pp. 3.3-7 – 3.3-8	Yes	NA	NA	LTS	No	Yes

[1] LTS = less than significant.

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

New Agriculture and Forestry Resource Impacts: Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.2.1 Discussion

IMPACT AG-1

Phase I Treatments

Phase I of the proposed project would implement the ecological restoration treatment type using only mechanical treatments activities. The treatment area is forested land currently comprised of predominately dead and dying trees. The potential for the Phase I treatment type and treatment activities to result in the loss of forestland or conversion of forestland to non-forest use was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.3-7 and 3.3-8).

Phase I treatments are aimed at modifying existing fuels to provide ideal conditions for the natural recruitment of Monterey pine, while reducing fuel loads to protect the regeneration of native vegetation and improve habitat conditions. During Phase I of the project, dead, dying, and hazard trees (i.e., trees that are considered a direct threat to personal safety or infrastructure) would be removed, which would help to increase the site's carrying capacity for stand volume, which in turn would increase the growth and vigor of any remaining live trees. Consistent with the PEIR, the vegetation remaining after treatments would meet the definition of forestland as defined in Public Resources Code Section 12220(g), and no loss of forestland or conversion to non-forest uses would occur. Therefore, the potential for Phase I of the proposed project to result in the loss or conversion of forestland is within the scope of

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

Phase II Treatments

Phase II of the proposed project includes ecological restoration and shaded fuel break vegetation treatments through manual and mechanical treatment activities and herbicide application. During this second phase of treatment, the project would treat the naturally regenerating Monterey pine, successional understory fuels, and invasive species to enhance the ecosystem processes, conditions, and resiliency of the successional vegetation, as well as create a 27-acre shaded fuel break along Last Chance Road that would prevent or slow the spread of future wildland fires to structures and surrounding natural resources. The project would not remove trees for commercial purposes and would not remove live trees established in the overstory canopy due to the 8-inch dbh limitation. Although this project proposes the removal of understory vegetation and ladder fuels, treatments would improve the forest's health and improve the vigor of the retained trees and would not result in the conversion of forest land to non-forest land. Consistent with the PEIR, the vegetation remaining after treatments would meet the definition of forestland as defined in Public Resources Code Section 12220(g), and no substantial loss of forestland or conversion to non-forest uses would occur. Therefore, the potential for Phase II of the proposed project to result in the loss or conversion of forestland is within the scope of the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment types and activities as described under "Phase II Treatments," above and would therefore have the same potential to result in the loss or conversion of forestland to non-forest land uses. Therefore, consistent with the PEIR, the vegetation remaining after maintenance treatments would meet the definition of forestland as defined in Public Resources Code Section 12220(g), and no substantial loss of forestland or conversion to non-forest uses would occur. Thus, the potential maintenance treatments to result in the loss or conversion of forestland is within the scope of the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW AGRICULTURE AND FORESTRY RESOURCE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.3.1, "Environmental Setting," and Section 3.3.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to agriculture and forestry resources would occur that is not covered in the PEIR.

4.3 AIR QUALITY

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

[1] LTS = less than significant; SU = significant and unavoidable.

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

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.3.1 Discussion

IMPACT AQ-1

Phase I Treatments

Use of vehicles and equipment during Phase I vegetation treatments and biomass disposal would result in emissions of criteria pollutants that could exceed California ambient air quality standards (CAAQS) or national ambient air quality standards (NAAQS) thresholds. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.4-26 through 3.4-33). Emissions of criteria air pollutants as a result of vehicle and equipment use during Phase I of the proposed project, as well as biomass disposal, would be potentially significant and is within the scope of the PEIR because the size of treatment crews, the types of equipment, and the duration of equipment use would be consistent with those analyzed in the PEIR. The SPRs applicable to the proposed project are SPR AQ-1 and SPR AQ-4. Emission reduction techniques included in Mitigation Measure AQ-1 would be infeasible for the project proponent to implement because funding for project implementation is limited and prioritizes the removal of dead, dying, and hazard trees currently present in the treatment area. It would be cost prohibitive to use equipment meeting the latest efficiency standards, including meeting the U.S. Environmental Protection Agency's Tier 4 emission standards, using renewable diesel fuel, using electric- and gasoline-powered equipment, and using equipment with Best Available Control Technology. In addition, the implementation of the project would reduce long-term impacts to air quality by reducing the amount of vegetative fuels available to burn in future wildfires. Therefore, this impact would remain unavoidable and potentially significant for the same reasons explained in the PEIR, but for the reasons explained above, would not constitute a substantially more severe significant impact.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass, which could result in emissions of criteria pollutants that could exceed the CAAQS or NAAQS thresholds from equipment and vehicle use. The potential for equipment and vehicles uses to generate air quality emissions that exceed the CAAQS and NAAQS is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the size of treatment crews, the types of equipment, and the duration of equipment use would be consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AQ-1 and SPR AQ-4. Mitigation Measure AQ-1 is also applicable to this impact; however, it is infeasible to implement as described above under "Phase I Treatments." This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in emissions of criteria pollutants that could exceed the CAAQS or NAAQS thresholds. This impact is within the scope of the PEIR because the size of maintenance treatment crews, the types of equipment, and the duration of equipment use would be consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AQ-1 and SPR AQ-4. Mitigation Measure AQ-1 is also applicable to this impact; however, it may be infeasible to implement for the reasons described above under "Phase I Treatments." This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT AQ-2

Phase I Treatments

Use of vehicles and mechanical equipment during Phase I vegetation treatments and biomass disposal could expose people to diesel particulate matter emissions in the vicinity of the treatment area. The potential to expose people to

diesel particulate matter emissions during vegetation treatments was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.4-33 through 3.4-34). Consistent with the PEIR, because of the short and intermittent nature of treatment activities (e.g., Phase I occurring over approximately 40 days), that treatment activities would occur in an undeveloped area without people (e.g., residences, schools) immediately nearby, and treatments would move throughout the treatment areas and not take place in the same location for an extended period of time, treatment activities would not expose any person to an incremental increase in cancer risk associated with diesel particulate matter greater than 10 in one million or a Hazard Index of 1.0 or greater. Diesel particulate matter emissions from the proposed treatments would be within the scope of the PEIR, because the types and amount of equipment that would be used, as well as the duration of use during proposed treatments, are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are AQ-1, HAZ-1, NOI-4, and NOI-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass, which could expose people to diesel particulate matter emissions from equipment and vehicles in the vicinity of the treatment area. The potential for equipment and vehicles use to expose people to diesel particulate matter emissions is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the types and amount of equipment that would be used, as well as the duration of use during proposed treatments, are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are AQ-1, HAZ-1, NOI-4, and NOI-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to expose people to diesel particulate matter emissions during vegetation treatments. This impact is within the scope of the PEIR because the types and amount of equipment that would be used, as well as the duration of use during proposed treatments, are consistent with those analyzed in the PEIR. SPRs applicable to this treatment are AQ-1, HAZ-1, NOI-4, and NOI-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT AQ-3

Phase I Treatments

Phase I of the project proposes mechanical treatment activities that would involve ground disturbance and could expose people to fugitive dust emissions containing naturally occurring asbestos (NOA) if present in soils. The potential to expose people to fugitive dust emissions containing NOA was examined in the PEIR (CalVTP Final PEIR Volume II Section 3.4.3, page 34-35). According to the California Department of Conservation and U.S. Geological Survey, NOA is not anticipated to occur in the treatment area (DOC 2010; USGS 2011). In addition, the implementation of SPR AQ-4 would minimize dust emissions as a result of treatment activities.

The potential for the project to result in the exposure of people to NOA is within the scope of the PEIR, because the proposed treatment activities and types of equipment proposed for use are consistent with those analyzed in the PEIR. SPR AQ-4 is applicable to the project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, which could result in the exposure of people to fugitive dust emissions containing NOA from ground disturbing treatments. The potential for ground disturbing treatments to release NOA during Phase II is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the Phase II treatment activities and the

types of equipment proposed for use during Phase II of the proposed project are consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AQ-5 and SPR AQ-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in the exposure of people to fugitive dust emissions containing NOA if present in soils. This impact is within the scope of the PEIR because the maintenance treatment activities and the types of equipment proposed for use during maintenance are consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AQ-4 and SPR AQ-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT AQ-4

This impact does not apply to the proposed project because no prescribed burning would occur.

IMPACT AQ-5

Phase I Treatments

Use of diesel-powered equipment during Phase I vegetation treatments and biomass disposal could expose people to objectionable odors from diesel exhaust in the vicinity of the treatment area. The potential to expose people to objectionable odors from diesel exhaust was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.4-37 and 3.4-38). Consistent with the PEIR, diesel exhaust emissions would be temporary, would not be generated at any one location for an extended period of time, and would dissipate rapidly from the source with an increase in distance. In addition, treatments would occur in undeveloped areas where humans are present intermittently and for brief periods. This impact is within the scope of the PEIR because the equipment that would be used and the duration of use under Phase I of the proposed project are consistent with what was analyzed in the PEIR. SPRs applicable to the proposed project are AQ-1, HAZ-1, NOI-4, and NOI-5.This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass, which could expose people to objectionable odors from diesel exhaust from equipment and vehicles in the vicinity of the treatment area. The potential for diesel-powered equipment to expose people to objectionable odors during Phase II is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the equipment that would be used and the duration of use under Phase II of the proposed project are consistent with what was analyzed in the PEIR. SPRs applicable to the proposed project are AQ-1, HAZ-1, NOI-4, and NOI-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to expose people to objectionable odors from diesel exhaust. This impact is within the scope of the PEIR because the equipment that would be used and the duration of use during maintenance treatments is consistent with what was analyzed in the PEIR. SPRs applicable to the proposed project are AQ-1, HAZ-1, NOI-4, and NOI-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT AQ-6

This impact does not apply to the proposed project because no prescribed burning would occur.

NEW AIR QUALITY IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.4.1, "Environmental Setting," and Section 3.4.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to air quality would occur that is not covered in the PEIR.

4.4 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

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

[1] LTS = less than significant; LTSM = less than significant with mitigation; SU = significant and unavoidable.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Archaeological, Historical, and Tribal Cultural Resource Impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.4.1 Discussion

The requirements of SPRs CUL-1 and CUL-3 from the CalVTP PEIR have been met by the cultural resources records search conducted for the proposed project. A cultural resources records search from the Northwest Information Center (NWIC) was completed for the 60 acres that comprise the treatment area. The records search identified that the treatment area has never been previously surveyed for the presence of cultural resources. Consistent with CalVTP SPR CUL-2, a list of geographically affiliated Native American representatives was obtained from the NAHC on November 7, 2021. On behalf of the RCD, Ascent sent seven emails on November 9, 2021, and one letter on November 10, 2021, inviting each Native American representative to consult on the proposed project. To date, no

responses have been received from any Native American tribes. A November 7, 2021, search of NAHC's sacred lands database returned negative results. A list of the representatives identified by the NAHC and the method of contact and any response received is provided in Table 4.4-1 below.

Table 4.4-1 Geographically Affiliated Native American Representatives Contact Record

Name and Title	Affiliation	Date and Method of Initial Contact	Response Summary
Valentin Lopez, Chairperson	Amah Mutson Tribal Band	November 9, 2021 Email	None to date.
Irene Zwierlein, Chairperson	Amah Mutson Tribal Band of Mission San Juan Bautista	November 9, 2021 Email	None to date
Patrick Orozco, Chairperson	Coastanoan Ohlone Rumsen-Mutsen Tribe	November 9, 2021 Email	None to date
Kanyon Sayers-Roods	Indian Canyon Mutsun Band of Coastanoan	November 10, 2021 Letter	None to date
Ann Marie Sayers, Chairperson	Indian Canyon Mutsun Band of Coastanoan	November 9, 2021 Email	None to date
Monica Arellano, Vice Chairwoman	Muwekma Ohlone Indian Tribe of the San Francisco Bay Area	November 9, 2021 Email	None to date
Dee Manzanares Ybarra, Chairperson	Rumsen Am:a Tur:ataj Ohlone	November 9, 2021 Email	None to date
Kenneth Woodrow, Chairperson	Wuksache Indian Tribe/Eshom Valley Band	November 9, 2021 Email	None to date

IMPACT CUL-1

Phase I Treatments

Phase I vegetation treatment activities include mechanical treatments that would limb and top large woody vegetation, which could damage built historical resources if present within the treatment area. The potential for these activities to result in disturbance to, damage to, or destruction of built-environment structures that have not yet been evaluated for historical significance was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.5-14 and 3.5-15).

According to the NWIC records search, the treatment area has never been surveyed. For this reason, there is a potential for built-environment structures (e.g., agricultural infrastructure, bridges) over 50 years old to be found that have not been evaluated for historical significance within or immediately adjacent to treatment area; it is also possible that wildfire burn experienced by the treatment area has heavily damaged or destroyed resources, if they were present. Structures in the treatment area were not apparent based on site visits that occurred on 10/14/21 and 1/14/22, however, if any built-environment structures with potential historic importance are identified within the treatment area by qualified archaeologists during archaeological surveys (as required by SPR CUL-4), they would be avoided per SPR CUL-7, which includes installing exclusion zones and prohibiting mechanical treatments within 100-feet of all built-environment resources. This impact is within the scope of the PEIR because the Phase I treatments and the intensity of ground disturbance that would occur during Phase I of the proposed project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-4, CUL-7, and CUL-8. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application. Limbing and topping large woody vegetation through manual and mechanical treatments could damage built historical resources if present within the treatment area. The potential impact to built historical resources during Phase II is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the Phase

II treatment activities and the intensity of ground disturbance that would occur during Phase II of the proposed project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-4, CUL-7, and CUL-8. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in disturbance to, damage to, or destruction of built-environment structures. This impact is within the scope of the PEIR because the maintenance treatment activities and the intensity of ground disturbance that would occur during maintenance are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-4, CUL-7, and CUL-8. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT CUL-2

Phase I Treatments

Phase I vegetation treatment activities would include mechanical treatments that use heavy equipment that could result in ground disturbance as vegetation is removed; this could result in damage to unique archaeological resources or subsurface historical resources if present within a treatment area. In addition, limbing and topping large woody vegetation could also damage above ground features associated with unique archaeological resources, if present. According to the NWIC records search, no archaeological resources have been previously identified within the treatment area; however, the treatment area has never been surveyed. The potential for these treatment activities to result in disturbance to, damage to, or destruction of such resources was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.5-15 and 3.5-16).

This impact is within the scope of the PEIR, because the treatment activities and the intensity of ground disturbance that would occur under the proposed project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-3, CUL-4 CUL-5, and CUL-8. Any archaeological resources identified as a result of implementation of SPR CUL-4 would be protected in place through avoidance during project implementation or treated as prescribed in SPR CUL-5. Mitigation Measure CUL-2 would be applied to protect any inadvertent discoveries of archaeological resources or subsurface historical resources and has been revised to comply with stricter PWP requirements related to the distance at which activity must cease if there is a discovery. This impact would be less than significant with implementation of mitigation, which is less severe than the significant and unavoidable impact identified in the PEIR. Therefore, it is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application. Ground disturbing manual and mechanical treatments could damage unique archaeological resources or subsurface historical resources if present within the treatment area. The potential impact to unique archaeological resources or subsurface historical resources during Phase II is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the Phase II treatment activities and the intensity of ground disturbance that would occur during Phase II of the proposed project are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-3, CUL-4 CUL-5, and CUL-8. Mitigation Measure CUL-2 would be applied to protect any inadvertent discoveries of archaeological resources or subsurface historical resources. This impact would be less than significant with implementation of mitigation, which is less severe than the significant and unavoidable impact identified in the PEIR. As such, it is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in disturbance to, damage to, or destruction of built-environment structures. This impact is within the scope of the PEIR because the maintenance treatment activities and the intensity of ground disturbance that would occur during maintenance are consistent with those analyzed in the PEIR. SPRs applicable to this impact are CUL-1, CUL-3, CUL-4 CUL-5, and CUL-8. Mitigation Measure CUL-2 would be applied to protect any inadvertent discoveries of archaeological resources or subsurface historical resources. This impact would be less than significant with implementation of mitigation, which is less severe than the significant and unavoidable impact identified in the PEIR. As such, it is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT CUL-3

Phase I Treatments

As described above, a Native American contact list was obtained from the NAHC, and eight tribal representatives were contacted. No responses have been received from any Native American tribes to date. The potential for treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource was examined in the PEIR (CalVTP Final PEIR pp. 3.5-16 and 3.5-17). Proposed Phase I treatment activities include mechanical treatments. Ground-disturbing activities, such as the use of heavy machinery and limbing and topping large woody vegetation could inadvertently damage or destroy tribal cultural resources if they are present in the treatment area. However, the letters sent to tribes pursuant to SPR CUL-2 requested information on the presence of TCRs in the treatment area and provided an opportunity for the tribes to advise on measures to protect any TCRs that are present. No responses were received, and it is assumed no TCRs are present. Potential impacts to archeological resources would be minimized and avoided as explained above in Impact CUL-2. SPRs applicable to this impact are CUL-1, CUL-2, and CUL-3, all of which are complete.

The potential for adverse effects on tribal cultural resources during implementation of Phase I of the proposed project is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

As described above for Phase I treatments, no responses from any tribes were received, and it is assumed no TCRs are present in the treatment area. Potential impacts to archeological resources would be minimized and avoided as explained above in Impact CUL-2. Therefore, the potential impact to tribal cultural resources during Phase II is the same as described under "Phase I Treatments," above and the same SPRs apply. This impact is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

As described above for Phase I treatments, no responses from any tribes were received, and it is assumed no TCRs are present in the treatment area. Potential impacts to archeological resources would be minimized and avoided as explained above in Impact CUL-2. Therefore, the potential impact to tribal cultural resources during maintenance treatments is the same as described under "Phase I Treatments," above and the same SPRs apply. This impact is within the scope of the activities and impacts addressed in the PEIR because the treatment activities and intensity of ground disturbance are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT CUL-4

Phase I Treatments

Phase I vegetation treatment activities would include mechanical treatments using heavy equipment; these treatments may use feller bunchers, skid steers, and/or chippers, which could uncover human remains if present in a treatment area. The potential for treatment activities to uncover human remains was examined in the PEIR (CalVTP Final PEIR Volume II p. 3.5-17). The NWIC records search did not reveal any known burials or sites containing human remains, but an inadvertent discovery could occur. This impact is within the scope of the PEIR, because the intensity of ground disturbance under the proposed project is consistent with what was analyzed in the PEIR. Additionally, consistent with the PEIR, the proposed project would comply with California Health and Safety Code Sections 7050.5 and Public Resources Code Section 5097 in the event of a discovery. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include ground disturbing manual and mechanical treatments which could uncover human remains if any were present within the treatment area. The potential impact to human remains during Phase II is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the Phase II treatment activities and the intensity of ground disturbance that would occur during Phase II of the proposed project are consistent with those analyzed in the PEIR. In the event of a discovery, compliance California Health and Safety Code Sections 7050.5 and Public Resources Code Section 5097 would occur as is prescribed in the PEIR. As such, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in disturbance to, damage to, or destruction of human remains. This impact is within the scope of the PEIR because the maintenance treatment activities and the intensity of ground disturbance that would occur during maintenance are consistent with those analyzed in the PEIR, which found that any discoveries would be subject to the procedures outlined under California Health and Safety Code Sections 7050.5 and Public Resources Code Section 5097. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.5.1, "Environmental Setting," and Section 3.5.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. Any cultural resources discovered during implementation of SPR CUL-4 would be avoided or treated as prescribed in SPR CUL-5. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur that is not covered in the PEIR.

4.5 BIOLOGICAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTSM	Impact BIO-1, pp 3.6-131–3.6.138	Yes	BIO-1 BIO-2 BIO-6 BIO-7 BIO-9 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HYD-4 HYD-5	BIO-1a BIO-1b	LTSM	No	Yes
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTSM (all wildlife species except bumble bees) S&U (bumble bees)	Impact BIO-2, pp 3.6-138–3.6-184	Yes	BIO-1 BIO-2 BIO-9 BIO-10 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HAZ-5 HAZ-6 HYD-1 HYD-4 HYD-5	BIO-2a BIO-2b	LTSM	No	Yes
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	LTSM	Impact BIO-3, pp 3.6-186–3.6-191	Yes	BIO-1 BIO-2 BIO-3 BIO-6 BIO-8 BIO-9 HAZ-5 HAZ-6 HYD-4 HYD-5	None	LTS	No	Yes
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTSM	Impact BIO-4, pp 3.6-191–3.6-192	Yes	BIO-1 BIO-2 GEO-1, GEO-3 GEO-4 GEO-5	None	LTS	No	Yes

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
				GEO-7 HYD-1 HYD-4 HAZ-5 HAZ-6				
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTSM	Impact BIO-5, pp 3.6-192–3.6-196	Yes	BIO-1 HYD-1 HAZ-5 HAZ-6	None	LTS	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTSM	Impact BIO-6, pp 3.6-197–3.6-198	Yes	BIO-1 BIO-12	None	LTS	No	Yes
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	NI	Impact BIO-7, pp 3.6-198–3.6-199	Yes	AD-3	NA	NI	No	Yes
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	NI	Impact BIO-8, pp 3.6-199–3.6-200	No	--	--	--	--	--

[1] LTS = less than significant; LTSM = less than significant with mitigation; NI = no impact; SU = significant and unavoidable.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.5.1 Discussion

Pursuant to SPR BIO-1, an Ascent biologist conducted a data review of project-specific biological resources, including habitat and vegetation types, and special-status plants, special-status wildlife, and sensitive habitats (i.e., sensitive natural communities and wetlands) with potential to occur in the treatment area. Habitat and vegetation types in the treatment area were initially identified using Fire and Resource Assessment Program FVEG vegetation mapping of the treatment area from prior to the 2020 CZU Lightning Complex. Although, pre-burn conditions were considered to assess the potential for resources to occur during initial and maintenance treatments, the baseline for the CEQA analysis in this PSA is the post-2020 CZU Lightning Complex burned condition of the treatment area. Further

refinement of the FVEG vegetation mapping occurred during a reconnaissance survey conducted pursuant to SPR BIO-1, and additional refinement to address sensitive natural communities will occur per SPR BIO-3, as discussed in Impact BIO-3 below.

A list of special-status plant and wildlife species with potential to occur within the treatment area was compiled by completing a review of the California Natural Diversity Database (CNDDB) and California Native Plant Society Inventory of Rare and Endangered Plants of California database records for the nine U.S. Geological Survey (USGS) quadrangles containing and surrounding the treatment area (CNDDB 2021; CNPS 2021), review of Exhibit C of the Santa Cruz County Forest Health and Fire Resilience PWP (RCD 2021), and Appendix BIO-3 (Table 1a, Table 1b, and Table 19) in the CalVTP PEIR (Volume II) for special-status plants and wildlife that could occur in the Central California Coast ecoregion. A list of sensitive natural communities with potential to occur within the treatment area was compiled by completing a CNDDB search of the nine USGS quads surrounding the treatment area (CNDDB 2021), reviewing Exhibit A of the PWP, and reviewing Table 3.6-3 (pages 3.6-25 – 3.6-27) in the CalVTP PEIR (Volume II) for CDFW-defined sensitive natural communities that could occur in the vegetation types mapped in the treatment area in the Central California Coast ecoregion. Sensitive natural communities are identified according to the Survey of California Vegetation Classification and Mapping Standards (i.e., the standards used in the Manual of California Vegetation).

Ascent conducted a reconnaissance survey pursuant to SPR BIO-1 on October 20, 2021 to identify and document sensitive resources (e.g., aquatic habitat, riparian habitat, sensitive natural communities) and to assess the suitability of habitat in the treatment area for special-status plant and wildlife species. Vegetation communities were identified, and incidental wildlife observations were recorded. Tree species observed within the treatment area include Douglas fir, tanoak, Monterey pine, redwood, and smaller numbers of madrone and coast live oak (*Quercus agrifolia*). The entire treatment area was heavily burned during the CZU Lightning Complex resulting in between 60 and 100 percent tree mortality and burning of much of the existing understory vegetation. At the time of the SPR BIO-1 survey, some woody vegetation had begun to re-sprout and herbaceous vegetation had begun to re-establish within the treatment area.

Based on implementation of SPR BIO-1, including review of occurrence data, species ranges, habitat requirements for each species, and habitat present within the treatment area as assessed during the reconnaissance survey, a complete list of all species with potential to occur in the vicinity of the proposed project was assembled (Appendix B). Twenty-six of the special-status plants and 13 of the special-status wildlife from the complete list of species were determined to have potential to occur in the treatment area during at least one phase of the project (Table 4.5-1). These species are discussed in detail under Impact BIO-1 (special-status plants) and Impact BIO-2 (special-status wildlife).

Table 4.5-1 Special-Status Plant and Wildlife Species That Could Occur in the Treatment Area

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Special-Status Plants						
Awned bent grass *Agrostis aristiglumis* (*A. microphylla*)	–	-	LCP	Valley grassland, wetland-riparian, common in many plant communities (Calflora 2021). Blooms May – July. Annual grass.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan. Suitable habitat may be present in the treatment area.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan. Suitable habitat may be present in the treatment area.
Anderson's manzanita *Arctostaphylos andersonii*	–	–	CRPR 1B.2	Broad-leafed upland forest, chaparral, north coast coniferous forest. Open sites, redwood forest. 200–2,500 feet in elevation. Blooms November–May. Perennial evergreen shrub.	**Could Occur:** The treatment area contains forested habitat that may be suitable for this species.	**Could Occur:** The treatment area contains forested habitat that may be suitable for this species.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Schreiber's manzanita *Arctostaphylos glutinosa*	–	–	LCP CRPR 1B.2	Closed-cone coniferous forest, chaparral. Mudstone or diatomaceous shale outcrops; often with *Pinus attenuata*. 560–2,250 feet in elevation. Blooms as early as November in some locations, generally March–April. Perennial evergreen shrub.	**Could Occur:** The treatment area contains forested habitat and soils that may be suitable for this species.	**Could Occur:** The treatment area contains forested habitat and soils that may be suitable for this species.
Swamp harebell *Campanula californica*	–	–	LCP CRPR 1B.2	Wetland. Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, freshwater marsh, north coast coniferous forest. Bogs and marshes in a variety of habitats; uncommon where it occurs. 5–1,330 feet in elevation. Blooms June–October. Perennial rhizomatous herb (geophyte).	**Could Occur:** The treatment area may contain suitable seep habitat for this species.	**Could Occur:** The treatment area may contain suitable seep habitat for this species.
San Francisco collinsia *Collinsia multicolor*	–	–	LCP CRPR 1B.2	Closed-cone coniferous forest, coastal scrub. On decomposed shale (mudstone) mixed with humus; sometimes on serpentine. 98–820 feet in elevation. Blooms as early as February; however generally blooms March–May. Annual.	**Could Occur:** The treatment area contains forested habitat and shale derived soils that may be suitable for this species.	**Could Occur:** The treatment area contains forested habitat and shale derived soils that may be suitable for this species.
Western leatherwood *Dirca occidentalis*	–	–	CRPR 1B.2	Broad-leafed upland forest, chaparral, closed-cone coniferous forest, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland. On brushy slopes, mesic sites; mostly in mixed evergreen and foothill woodland communities. 80–1,390 feet in elevation. Blooms January–March, and as late as April in some conditions. Perennial deciduous shrub.	**Could Occur:** The treatment area contains forested habitat that may be suitable for this species.	**Could Occur:** The treatment area contains forested habitat that may be suitable for this species.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
California bottle brush grass *Elymus californicus*	-	-	LCP CRPR 4.3	North Coast coniferous forest, cismontane woodland, broad-leafed upland forest, riparian woodland. In sandy humus soils. 50–1,540 feet in elevation. Blooms May–August and as late as November in some conditions. Perennial grass.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan. The treatment area contains coniferous forest habitat suitable for this species.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan. The treatment area contains coniferous forest habitat suitable for this species.
Coastal gumplant *Grindelia latifolia latifolia* (G. stricta var. Playphylls	-	-	LCP	Coastal Strand, Coastal Salt Marsh, Coastal Sage Scrub, wetland-riparian near coast. 0- 1,050 feet. Blooms May – October. Perennial herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan. Suitable wetland habitat may be present within the treatment area.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan. Suitable wetland habitat may be present within the treatment area.
Kellogg's (wedge leaved) horkelia *Horkelia cuneata* var. *sericea**	–	–	CRPR 1B.1	Closed-cone coniferous forest, coastal scrub, coastal dunes, chaparral. Old dunes, coastal sandhills; openings. 15–705 feet in elevation. Blooms April–September. Perennial herb.	**Could Occur:** The treatment area contains coniferous forest habitat and soils suitable for this species.	**Could Occur:** The treatment area contains coniferous forest habitat and soils suitable for this species.
Marsh microseris *Microseris paludosa*	–	–	CRPR 1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 15–980 feet in elevation. Blooms April–June, and as late as July in some conditions. Perennial herb.	**Could Occur:** The treatment area contains coniferous forest habitat and soils suitable for this species.	**Could Occur:** The treatment area contains coniferous forest habitat and soils suitable for this species.
Woodland woollythreads *Monolopia gracilens*	–	–	CRPR 1B.2	Chaparral, valley and foothill grassland, cismontane woodland, broad-leafed upland forest, north coast coniferous forest. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns but may have only weak affinity to serpentine. 330–3,940 feet in elevation. Blooms (February), March–July. Annual herb.	**Could Occur:** The treatment area contains coniferous forest habitat and rocky soils suitable for this species.	**Could Occur:** The treatment area contains coniferous forest habitat and rocky soils suitable for this species.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Dudley's lousewort *Pedicularis dudleyi*	–	SR	LCP CRPR 1B.2	Chaparral, north coast coniferous forest, valley and foothill grassland. Deep shady woods of older coast redwood forests; also in maritime chaparral. 200–2,950 feet in elevation. Blooms April–June. Perennial herb.	**Could Occur:** The treatment area contains coniferous forest habitat suitable for this species.	**Could Occur:** The treatment area contains coniferous forest habitat suitable for this species.
Gairdner's yampah *Perideridia gairdneri* ssp. *Gairdneri*	-	-	LCP CRPR 4.2	Broad-leafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools, vernally mesic sites. 0 to 2,000 feet in elevation. Blooms Jun -Oct. Perennial herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area may contain suitable habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area may contain suitable habitat.
Monterey pine *Pinus radiata*	–	–	LCP CRPR 1B.1	Closed-cone coniferous forest, cismontane woodland. Three primary stands are native to California. Dry bluffs and slopes. 200–410 feet in elevation. Perennial evergreen tree.	**Known to Occur:** The treatment area includes native Monterey pine.	**Known to Occur:** The treatment area includes native Monterey pine.
White-flowered rein orchid *Piperia candida*	–	–	CRPR 1B.2	North coast coniferous forest, lower montane coniferous forest, broad-leafed upland forest. Sometimes on serpentine. Forest duff, mossy banks, rock outcrops, and muskeg. 150–5,300 feet in elevation. Blooms As early as March in some conditions; however, generally blooms May–September. Perennial herb.	**Could Occur:** The treatment area contains forest habitat suitable for this species.	**Could Occur:** The treatment area contains forest habitat suitable for this species.
Michael's rein orchid *Piperia michaelii*	-	-	CRPR 4.2	Coastal bluff scrub, coastal scrub, cismontane woodland, chaparral, closed-cone coniferous forest, lower montane coniferous forest. Mudstone and humus, generally dry sites. 10–3002 feet in elevation. Blooms April–August. Perennial herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.
Lobb's aquatic buttercup *Ranunculus lobbii*	-	-	LCP CRPR 4.2	Cismontane woodland, valley and foothill grassland, vernal pools, north coast coniferous forest. Mesic sites. 50–1,540 feet in elevation. Blooms February–May. Annual herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable mesic coniferous forest habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable mesic coniferous forest habitat.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Straggly gooseberry *Ribes divaricatum* var. *publiflorum*	-	-	LCP	Wetland and riparian. 0 - 4,700 feet. Blooms March – May. Perennial shrub.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area may contain suitable wetland habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area may contain suitable wetland habitat.
Pine rose *Rosa pinetorum*	–	–	CRPR 1B.2	Closed-cone coniferous forest, cismontane woodland. 15–3,580 feet in elevation. Blooms May–July. Perennial shrub	**Could Occur:** The treatment area contains coniferous forest habitat suitable for this species.	**Could Occur:** The treatment area contains coniferous forest habitat suitable for this species.
Hoffmann's sanicle *Sanicula hoffmannii*	-	-	LCP CRPR 4.3	Broad-leafed upland forest, coastal scrub, coastal bluff scrub, chaparral, cismontane woodland, lower montane coniferous forest. Cool slopes in deep soil, often in moist shaded serpentine soils, or in clay soils. 100–1,000 feet in elevation. Blooms March–May. Perennial herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.
Santa Cruz microseris *Stebbinsoseris decipiens*	-	-	LCP CRPR 1B.2	Broad-leafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal prairie, coastal scrub, and valley and foothill grassland. 35- 1,640 feet in elevation. Blooms April – May. Annual herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.
Mt. Diablo cottonweed *Stylocline amphibioa (Micropus amphiboles)*	-	-	LCP CRPR 3.2	Valley and foothill grassland, cismontane woodland, chaparral, broad-leafed upland forest. Bare, grassy or rocky slopes. 150–2,700 feet in elevation. Blooms March–May. Annual herb.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area may contain suitable habitat following Phase I treatments.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area may contain suitable habitat following Phase I treatments.
Santa Cruz clover *Trifolium buckwestiorum*	–	–	CRPR 1B.1	Coastal prairie, broad-leafed upland forest, cismontane woodland. Moist grassland. Gravelly margins. 340–2,000 feet in elevation. Blooms April–October. Annual herb	**Could Occur:** The treatment area contains stands of broad-leafed upland forest habitat suitable for this species.	**Could Occur:** The treatment area contains stands of broad-leafed upland forest habitat suitable for this species.
West's clover *Trifolium grayi*	-	-	LCP	Redwood forest, mixed evergreen forest, wetland and riparian. 0 to 2,295 feet. Blooms April-June. Annual herb	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.	**Could Occur:** This species is identified in the Santa Cruz County Forest Health and Fire Resilience Public Works Plan; The treatment area contains suitable habitat.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Pacific Grove clover *Trifolium polyodon*	–	SR	CRPR 1B.1	Closed-cone coniferous forest, meadows and seeps, coastal prairie, valley and foothill grassland. Along small springs and seeps in grassy openings. 20–400 feet in elevation. Blooms April–June sometimes as late as July. Annual herb.	**Could Occur:** The treatment area contains coniferous forest habitat and may contain seeps suitable for this species.	**Could Occur:** The treatment area contains coniferous forest habitat and may contain seeps suitable for this species.
Special-Status Wildlife						
California giant salamander *Dicamptodon ensatus*	–	SSC	–	Meadow and seep, north coast coniferous forest, and riparian forest. Known from wet coastal forests near streams and seeps from Mendocino County south to Monterey County and east to Napa County. Aquatic larvae found in cold, clear streams, occasionally in lakes and ponds. Adults known from wet forests under rocks and logs near streams and lakes.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); and the treatment area during Phase I contains habitat suitable for this species.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); and the treatment area during Phase II and maintenance treatments is anticipated to contain habitat suitable for this species.
California red-legged frog *Rana draytonii*	FT	SSC	LCP	Artificial flowing waters, artificial standing waters, freshwater marsh, marsh & swamp, riparian forest, riparian scrub, riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters. Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	**Could Occur:** The species has been documented to occur within Waddell creek, which is located approximately 0.25 miles from the treatment area (CNDDB 2021), and the treatment area during Phase I contains upland/dispersal habitat suitable for this species.	**Could Occur:** The species has been documented to occur within Waddell Creek, which is located approximately 0.25 mile from the treatment area (CNDDB 2021), and the treatment area during Phase II and Maintenance is anticipated to contain upland/dispersal habitat for this species.
Santa Cruz black salamander *Aneides niger*	–	SSC	–	Mixed deciduous and coniferous woodlands and coastal grasslands in San Mateo, Santa Cruz, and Santa Clara counties. Adults found under rocks, talus, and damp woody debris.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); and the treatment area during Phase I contains habitat suitable for this species.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); and the treatment area during Phase II and maintenance treatments is anticipated to contain habitat suitable for this species.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Cooper's hawk *Accipiter cooperii*	–	–	LCP	Cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest. Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); however, the lack of foliage on the trees within the treatment area due to fire makes nesting unlikely during Phase I treatments. The treatment area may provide suitable foraging habitat for birds nesting in nearby unburned stands.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); and portions of the treatment area contain and are adjacent to more open coast live oaks that may be suitable for nesting and foraging during Phase II and maintenance treatments as foliage returns to live trees.
Long-eared owl *Asio otus*	–	SSC	–	Cismontane woodland, Great Basin scrub, riparian forest, riparian woodland, and upper montane coniferous forest. Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	**Not Expected to Occur:** The species has been documented to occur within the project region (CNDDB 2021); however, the lack of foliage on the trees within the treatment area due to fire makes the area unsuitable for nesting or foraging during Phase I.	**Could Occur:** The species has been documented to occur within the project region (CNDDB 2021); and the western portion of the treatment area is adjacent to suitable open foraging habitat. Return of foliage to live trees in the treatment area during Phase II and maintenance treatments would provide suitable nesting habitat for this species. In addition, as the forest is opened up the treatment area may provide suitable foraging habitat.
Osprey *Pandion haliaetus*	–	–	LCP	Riparian forest. Ocean shore, bays, fresh-water lakes, and larger streams. Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	**Could Occur:** Osprey often nest in snags, broken top trees and other sites with little cover; therefore, the treatment area during Phase I contains suitable nesting habitat for the species. The species has been documented to occur within the project region (CNDDB 2021).	**Could Occur:** The treatment area is anticipated to contain suitable nesting habitat for the species during Phase II and maintenance treatments. The species has been documented to occur within the project region (CNDDB 2021).
White-tailed kite *Elanus leucurus*	–	FP	–	Cismontane woodland, marsh and swamp, riparian woodland, valley and foothill grassland, and wetlands. 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.	**Not Expected to Occur:** The species has been documented to occur within the project region (CNDDB 2021); however, the lack of foliage on the trees within the treatment area due to fire makes the area unsuitable for nesting or foraging during Phase I.	**Could Occur:** The treatment area is anticipated to contain suitable nesting habitat for the species during Phase II and maintenance treatments as foliage returns to live trees. The species has been documented to occur within the project region (CNDDB 2021). In addition, as the forest is opened up, the treatment area may provide suitable foraging habitat.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
American badger *Taxidea taxus*	-	SSC	LCP	Alkali marsh, alkali playa, alpine, alpine dwarf scrub, bog a fen, brackish marsh, broad-leafed upland forest, chaparral, chenopod scrub, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	**Not Expected to Occur:** The treatment area post fire and during Phase I is likely too densely wooded to provide suitable habitat for the species, which normally is found in more open woodland and grassland habitats. The species has been documented to occur within the project region near Pidgeon Point (CNDDB 2021).	**Could Occur:** The treatment area is anticipated to contain suitable habitat for the species during Phase II and maintenance treatments, which would occur when treatment area contains more open habitats. The species has been documented to occur within the project region near Pigeon Point (CNDDB 2021).
Ringtail *Bassariscus astutus*	–	FP	–	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations.	**Could Occur:** The treatment area during Phase I contains suitable forested habitat for this species. There are no documented occurrences in the project region; although the species in not tracked in the CNDDB.	**Could Occur:** The treatment area is anticipated to contain suitable habitat for the species during Phase II and maintenance treatments. There are no documented occurrences in the project region; although the species in not tracked in the CNDDB.
Mountain lion-Southern California/ Central Coast evolutionary significant unit *Puma concolor*	–	SC	–	Found in most habitats within Central California. Uses caves, other natural cavities, and brush thickets for cover and denning, often within riparian habitats.	**Could Occur:** The treatment area during Phase I contains suitable foraging habitat for mountain lion. Although nursery habitat is unlikely to occur within the treatment area (Yovovich pers. comm. 2021), nursery habitat may be present adjacent (within 2,000 feet) to the treatment area.	**Could Occur:** The treatment area is anticipated to contain suitable foraging and suitable nursery may be present adjacent (within 2,000 feet) to the treatment area during Phase II and maintenance treatments.

Species	Listing Status[1]			Habitat	Potential for Occurrence During Phase I	Potential for Occurrence During Phase II and Maintenance Treatments
	Federal	State	Other			
Pallid bat *Antrozous pallidus*	–	SSC	–	Chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, valley and foothill grassland. Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Could Occur:** The treatment area during Phase I contains suitable roosting and foraging habitat for the species. The species has been documented to occur only historically within the project region (CNDDB 2021); however, bat species may be under reported.	**Could Occur:** The treatment area is anticipated to contain suitable habitat for the species during Phase II and maintenance treatments. The species has been documented to occur only historically within the project region (CNDDB 2021); however, bat species may be under reported.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	–	SSC	–	Chaparral, redwood. Forest habitats of moderate canopy and moderate to dense understory. May prefer chaparral and redwood habitats. Constructs nests of shredded grass, leaves and other material. May be limited by availability of nest-building materials.	**Could Occur:** The treatment area was burned in 2020, and it is likely that any nests in the area were destroyed. However, Vreeland and Tietje (1998) found woodrat populations recovered less than one year following fire in some areas. Documented to occur along lower Scott Creek downstream from treatment area (CNDDB 2021).	**Could Occur:** The treatment area is anticipated to contain suitable forested habitat, with moderate understory in some locations. Documented to occur along lower Scott Creek downstream from treatment area (CNDDB 2021).

1. Legal Status Definitions:

California Rare Plant Ranks (CRPR):

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
3 Plant species for which more information is needed (not protected under CEQA)
4 Plants of limited distribution, a watch list

CRPR Threat Ranks:

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

State: SR State Listed as Rare (legally protected by NPPA)
FP Fully Protected (legally protected)
SSC Species of Special Concern (no formal protection other than CEQA consideration)
SC State Candidate for Listing

Federal: FT Federally Listed as Threatened (legally protected)

Other:

CRPR (see above)
LCP Species listed in the Santa Cruz County Local Coastal Program Forest Health and Fire Resilience Public Works Plan

CESA = California Endangered Species Act; CEQA = California Environmental Quality Act; CRPR = California Rare Plant Rank; ESA = Endangered Species Act; NPPA = Native Plant Protection Act

Sources: Calflora 2021; CNDDB 2021; CNPS 2021; Vreeland and Tietje 1998; SC RCD 2021; Yovovich pers. comm. 2021

IMPACT BIO-1

During the SPR BIO-1 reconnaissance-level survey of the treatment area conducted on October 20, 2021, it was observed that the entire treatment area had been burned by the 2020 CZU Lightning Complex, resulting in between 60 and 100 percent tree mortality and loss of much of the understory vegetation. However, as evidenced by the presence of vegetation observed re-establishing within the treatment area, at least some of the seed bank survived the intensity of the fire and remains present in the soil. Therefore, any of the special-status plants that may have occurred within the treatment area before the fire may resprout or grow from the established seed bank.

Phase I Treatments

The proposed mechanical treatments during Phase I could result in direct or indirect adverse effects on the 25 special-status plant species with suitable habitat in the treatment area. The potential for treatment activities to result in adverse effects on special-status plants was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-131 to 3.6-138). The broadcast of chips and mulch over the treatment area of up to 4 inches would not have an adverse effect on special-status plant species.

Of the 25 special status species, Gairdner's yampah, Lobb's aquatic buttercup, swamp harebell, Santa Cruz clover, Pacific Grove clover, and West's clover are likely to be limited to wetter portions of the treatment area adjacent to intermittent streams, seeps, and springs. Pursuant to SPR HYD-4, Watercourse and Lake Protection Zones (WLPZs) adjacent to all aquatic habitat within the treatment area would be implemented, which would avoid some of the aquatic habitat that could support these species.

SPR BIO-7 would apply to Phase I treatments and would require protocol-level surveys for special-status plants due to the potential for ground disturbance by mechanical treatments to alter habitat in a way that would make it unsuitable for the special-status plants to re-establish following treatment, or destroy seeds; stumps; or roots, rhizomes, bulbs, and other underground parts of special-status plants. Where protocol-level surveys identify special-status plants, Mitigation Measure BIO-1b would be implemented to avoid loss of identified special-status plants. Where protocol-level surveys identify the presence of special-status plants, Mitigation Measure BIO-1a would be implemented for plants listed as rare under the Native Plant Protection Act (NPPA) (i.e., Dudley's lousewort, Pacific Grove clover); no plants listed under ESA or listed as threatened or endangered under CESA have the potential to occur in the treatment area. For all other special-status plants, Mitigation Measure BIO-1b would be implemented. Per Mitigation Measures BIO-1a and BIO-1b, if special-status plants are identified during protocol-level surveys, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which mechanical treatment would not occur unless a qualified RPF or botanist determines that the species would benefit from treatment in the occupied habitat area. The size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. SPRs applicable to this impact are BIO-1, BIO-2, BIO-6, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, and HYD-4. Mitigation Measure BIO-1b is also applicable to this impact.

This impact on special-status plants is within the scope of the PEIR because the affected special-status plant species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Mechanical treatments and biomass disposal proposed as part of Phase II would have the same potential impacts to special-status plants as those described for Phase I. Manual treatments using chainsaws and hand-tools would not result in ground disturbance, but individual plants could be crushed by crews on foot. Adverse effects on the 10 special-status plant species that may occur within the treatment area, which are herbaceous annual species or geophytes (Table 4.5-1), could therefore be avoided by conducting manual treatment activities during the dormant season (i.e., when the plant has no aboveground parts). If manual treatments cannot be completed in the dormant

season and would be implemented during the growing period of these annual and geophyte species, protocol surveys (per SPR BIO-7) and avoidance of any identified special-status plants (per Mitigation Measure BIO-1b) will be implemented, as described below. The remaining 16 special-status plant species that have potential to occur within the treatment area are perennial species, which could not be avoided in the same manner as herbaceous annual species or geophytes as they would be present above ground year-around; therefore, protocol-level surveys under SPR BIO-7 to identify them would be necessary before implementing manual treatment activities at any time of year.

Herbicide treatments implemented during Phase II have the potential to adversely impact special-status plants. To avoid impacts from herbicides on special-status plant species, SPR HYD-5 would be implemented, which requires herbicide mixing sites be located away from non-target vegetation, a 50-foot buffer of Endangered Species Act (ESA) or California Endangered Species Act (CESA) listed plant species within which herbicides cannot be applied, use of dye in herbicides to avoid inadvertent application to non-target vegetation by overspray, and restrictions on application in windy conditions to avoid herbicide drift.

Where protocol-level surveys are required (per SPR BIO-7) and special-status plants are identified during these surveys, Mitigation Measure BIO-1b would be implemented to avoid loss of identified special-status plants. Per Mitigation Measures BIO-1a and BIO-1b, if special-status plants are identified during protocol-level surveys, a no-disturbance buffer of at least 50 feet would be established around the area occupied by the species within which mechanical treatment and manual treatment would not occur unless a qualified RPF or botanist determines that the species would benefit from treatment in the occupied habitat area (e.g., thinning of establishing Monterey pine would benefit the growth and vigor of remaining Monterey pines). The size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. SPRs applicable to this impact are BIO-1, BIO-2, BIO-6, BIO-7, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HAZ-5, HAZ-6, HYD-4, and HYD-5. Mitigation Measures BIO-1a and BIO-1b are also applicable to this impact.

This impact on special-status plants is within the scope of the PEIR because the affected special-status plant species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as Phase II; therefore, the potential for adverse effects to special-status plants during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on special-status plants is within the scope of the PEIR because the affected special-status plant species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT BIO-2

The proposed project could result in direct or indirect adverse effects on special-status wildlife species and habitat suitable for these species within the treatment area, as described in the following sections.

Special-Status Salamanders

Two special-status salamanders have potential to occur within the treatment area: California giant salamander and Santa Cruz black salamander (Table 4.5-1). While there are no perennial streams within the treatment area, the treatment area contains the headwaters of an intermittent stream, is within 500 feet of an additional intermittent stream, and is within 0.30 mile of the perennial Waddell Creek. Therefore, the treatment area is upland habitat for these species where understory vegetation and logs are present for cover.

Phase I Treatments

The proposed mechanical treatment and the broadcast of chips and mulch over the treatment area of up to 4 inches during Phase I could result in direct or indirect adverse effects on special-status salamanders though the temporary alteration of habitat. The potential for treatment activities to result in adverse effects on special-status salamanders was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184). WLPZs adjacent to all aquatic habitat within the treatment area would be implemented per SPR HYD-4 and would reduce adverse effects; however, these measures would not result in full avoidance of adverse effects on special-status salamanders.

Per SPR BIO-1, if it is determined that adverse effects on special-status salamanders can be clearly avoided by physically avoiding the suitable habitat, then no mitigation would be required. However, because California giant salamander and Santa Cruz black salamander may be present year-around relatively large distances from aquatic habitat where cover is present within the treatment area, it is unlikely that all potentially suitable habitat for these species can be avoided by Phase I treatments. As a result, SPR BIO-10 would apply, and focused surveys for special-status salamanders would be conducted within suitable habitat before implementation of Phase I mechanical treatments.

If special-status salamanders are not detected within the treatment area during focused surveys, then no mitigation for the species would be required. If special-status salamanders are detected during focused surveys, then Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, the RCD would require biological monitoring for treatment activities within or adjacent to sensitive habitat areas (e.g., intermittent streams, seeps, springs), flagging areas for avoidance, relocation of individual animals by a qualified RPF or biologist with a valid CDFW scientific collecting permit, and/or other measures recommended by a qualified biologist or RPF or CDFW to avoid injury or mortality of these species. SPRs applicable to this impact are BIO-1, BIO-2, BIO-9, BIO-10, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HYD-1, and HYD-4. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on special-status salamanders is within the scope of the PEIR because the affected special-status salamander species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential impacts to special-status salamanders during Phase II mechanical and manual treatments would be substantially similar to those described for Phase I and could result in direct or indirect adverse effects on special-status salamanders. However, herbicide treatments proposed during Phase II would have the potential for additional adverse effects. To avoid and minimize impacts from herbicides on special-status salamanders, SPR HAZ-5, SPR HAZ-6, and SPR HYD-5 would be implemented. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-9, BIO-10, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HAZ-5, HAZ-6, HYD-1, HYD-4, HYD-5. Mitigation Measure BIO -2b is also applicable to this impact.

This impact on special-status salamanders is within the scope of the PEIR because the special-status salamander species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to special-status salamanders during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on special-status salamanders is within the scope of the PEIR because the affected special-status salamander species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of

implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

California Red-Legged Frog

California red-legged frog has been documented to occur within Waddell Creek, Scott Creek, and Laguna de las Trancas (CNDDB 2021). These waters are all located between 0.30 mile and 0.75 mile of the treatment area. Studies have demonstrated that California red-legged frogs remain very close to breeding habitat during the breeding season and typically do not move more than approximately 300 feet into upland habitats (Bulger et al. 2003; Fellers and Kleeman 2007). There is no breeding habitat suitable for California red-legged frog within or directly adjacent to the treatment area. However, adult and juvenile California red-legged frog are known to travel through upland habitat (e.g., riparian, woodland, grassland) to move between breeding and nonbreeding sites (e.g., other ponds, deep pools in streams, moist and cool riparian understory, burrows) for access to refugia and foraging habitat, or to disperse to new breeding locations. During migration, California red-legged frogs may travel long distances from aquatic habitat and typically travel in straight lines irrespective of vegetation types and have been documented to move over 1.7 miles between aquatic habitat sites (Bulger et al. 2003). Although the quality of the habitat likely declined due to the 2020 CZU Lighting Complex, the treatment area is still suitable upland and dispersal habitat. Therefore, California red-legged frog has potential to occur within the treatment area.

Phase I Treatments

Phase I treatments would involve ecological restoration through mechanical treatment activities and chipping and masticating of biomass, which could negatively affect California red-legged frogs if present in the treatment area. The potential for treatment activities to result in adverse effects on California red-legged frog was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184). SPR HYD-4 would require implementation of WLPZs adjacent to any nonbreeding aquatic habitat (e.g., headwaters of an intermittent stream) within the treatment area. However, this measure may not avoid impacts on California red-legged frogs because individuals from known populations within dispersal range of the treatment area (i.e., Waddell Creek, Scott Creek, and Laguna de las Trancas) may move through the treatment area outside the WLPZ.

Per SPR BIO-1, if it is determined that adverse effects on California red-legged frog can be clearly avoided by physically avoiding the suitable habitat, or by conducting treatments outside of the season when California red-legged frogs are present, then no further action would be required. Under SPR GEO-1, ~~the RCD would be required to conduct treatments outside of the wet season~~ all mechanized equipment, including track chippers, and herbicide treatments will shut down for 24 hours following any precipitation event of 0.20 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches, which would minimize impacts during the period when frogs could be moving within the treatment area. ~~The wet season begins with the first frontal rain system depositing a minimum of 0.25 inch of rain after October 15 and ends on April 15. Additionally, mechanized treatments would be avoided 24 hours after a rain event defined as any precipitation resulting in 0.2 inch or greater throughout the year.~~ Implementation of SPR GEO-1 would avoid work when California red-legged frog may be moving within the treatment area ~~during the wet season~~ following precipitation; however, the species may be present in the project site year-around when soil moisture and humidity are high. Because California red-legged frog may move through the treatment area and use the treatment area as upland habitat year-around, all adverse effects cannot be clearly avoided and therefore SPR BIO-10 would apply. Pursuant to SPR BIO-10, the RCD would assume presence of California red-legged frog, and Mitigation Measure BIO-2a would be required. Under Mitigation Measure BIO-2a, the RCD would be required to conduct biological monitoring and non-disturbance buffers around individual frogs for all treatment activities, and restrict mechanical treatments within 30 feet of Class III streams. The limitation of Phase I mechanical treatments ~~to outside of the wet season and 24 hours after a~~ following rain events and other measures would avoid disturbance, injury or mortality of California red-legged frogs.

Although California red-legged frogs would be avoided by limiting mechanical treatments following ~~working only outside the wet season, working no sooner than 24 hours after~~ a rain event, biological monitoring, and non-

disturbance buffers. Phase I treatments would occur within potentially suitable movement and upland habitat. However, habitat function for California red-legged frogs would be maintained during Phase I treatments. Phase I treatments would be limited in WLPZs within the treatment area, which are the most frequently used habitats of California red-legged frog. Within other upland and movement habitat, existing native herbaceous vegetation would be retained in a mosaic pattern, downed wood greater than 12 inches in diameter (at a maximum density of approximately 10 tons per acre) and a portion of existing native shrubs would be retained, which would maintain cover for California red-legged frogs. Mitigation Measure BIO-2a would require that habitat features necessary for survival (e.g., downed wood, native herbaceous vegetation, and native shrubs for cover) would be retained. In addition, the following SPRs would be implemented to avoid indirect adverse effects to aquatic habitat: SPR GEO-3 requires stabilization of disturbed soil, SPR GEO-4 requires erosion monitoring, SPR GEO-5 requires use of water breaks to drain stormwater, SPR GEO-7 would limit heavy equipment on steep slopes, and HYD-1 requires compliance with water quality regulations.

Pursuant to Mitigation Measure BIO-2a, and because this species is listed under ESA, the RCD must consult with USFWS about its determination that mortality, injury, or disturbance would not occur, and habitat function would be maintained. For the reasons summarized above, the RCD determined that implementation of Phase 1 treatments would maintain habitat function for California red-legged frog and consulted with USFWS to seek technical input on this determination, as required. On December 22, 2021, the RCD sent a memo to Chad Mitcham, USFWS Service describing the measures that would be taken to maintain habitat function in compliance with Mitigation Measure BIO-2a (see Appendix D). In addition, Chad Mitcham and the RCD met at the Last Chance Road treatment area on January 4, 2022, to discuss and refine the proposed measures. Refinements to the project description that resulted from this consultation included a retention standard for herbaceous vegetation, refinements to the use of chipped and masticated material, and refinements to the retention of snags and down logs (Section 2.3.1, "Mechanical Vegetation Treatment – Phase I and II" and Section 2.4, "Biomass disposal"). Following the site visit on January 4, 2022 to the Last Chance Road treatment area, these refinements were confirmed as appropriate by USFWS in an email from Chad Mitcham dated January 18, 2022. SPRs applicable to this impact are BIO-1, BIO-2, BIO-9, BIO-10, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, and HYD-4. Mitigation Measure BIO-2a is also applicable to this impact.

This impact on California red-legged frog is within the scope of the PEIR because effects on California red-legged frog was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential adverse effects to California red-legged frog during Phase II mechanical and manual treatments would be substantially similar to those described for Phase I and the same SPRs would apply. However, the application of herbicides directly to stumps and stems, or as localized spot treatments using hand-held devices proposed during Phase II would have the potential for additional adverse effects to California red-legged frogs. To avoid and minimize impacts from herbicides on California red-legged frog, SPR HAZ-5, SPR HAZ-6, and SPR HYD-5 would be implemented. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides, including the California Red-Legged Frog Injunction (refer to Section 2.3.3, "Herbicide Application – Phase II"). SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-9, BIO-10, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HAZ-5, HAZ-6, HYD-1, HYD-4, HYD-5. Mitigation Measure BIO-2a is also applicable to this impact.

This impact on California red-legged frog is within the scope of the PEIR because effects on California red-legged frog was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to California red-legged frog during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on California red-legged frog is within the scope of the PEIR because effects on California red-legged frog was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Special-Status Birds

Osprey is the only special-status bird species that may nest within the treatment area during Phase I (Table 4.5-1). Cooper's hawk is not likely to nest in the treatment area during Phase I due to the lack of foliage in the tree canopy; however, individuals that may nest in nearby unburned/ lightly burned habitat with intact canopies may forage within the treatment area. Long-eared owl and white-tailed kite are not anticipated to forage or nest within the treatment area during Phase I; however, Cooper's hawk, long-eared owl, and white-tailed kite may all nest within the treatment area during Phase II and maintenance treatment once the foliage returns to live trees and the habitat within the treatment area becomes more open following Phase I treatments.

Phase I Treatments

Phase I treatment activities are planned to occur during the nesting season (February 1–August 31), and therefore direct removal of potential nests and indirect adverse effects from noise and human/mechanical disturbance on nesting osprey may occur from the use of heavy equipment. The potential for treatment activities, including maintenance treatments, to result in adverse effects on special-status birds was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184). Per SPR BIO-1, if it is determined that adverse effects on special-status species can be clearly avoided by physically avoiding the suitable habitat or by conducting treatments outside of the season when a sensitive resource is present, then no additional action would be required. However, because osprey could be nesting in snags in multiple locations within the treatment area during the time when treatments are conducted, there is no feasible way to avoid all potentially suitable habitat for these species during implementation of Phase I treatments. Therefore, SPR BIO-10 would apply, and focused surveys for osprey nests within the treatment area would be conducted by a qualified biologist within 14 days before implementation of all Phase I mechanical treatments that are conducted during the nesting season to determine whether osprey are present. If no osprey nests are observed during focused surveys, then additional mitigation for these species would not be required. If osprey nests are observed during focused surveys, then Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, trees with visible nests will be retained, whether or not the nests occupied. In addition, a no-disturbance buffer of at least 500 feet would be established around active osprey nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF.

The proposed Phase I treatments are not expected to result in long term adverse effects on foraging Cooper's hawk, because treatments would not substantially alter the habitat for prey species (e.g., songbirds). This is because native live trees greater than 8 inches dbh would not be removed, and because existing downed wood greater than 12 inches in diameter (approximately 10 tons per acre), 1 to 2 snags greater than 12 inches dbh per acre, and a portion of native herbaceous vegetation and shrubs would be retained within the treatment area. Nesting habitat for osprey would be similarly maintained through live tree and snag retention within the treatment area. SPRs applicable to this impact are BIO-1, BIO-2, and BIO-10. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on special-status birds is within the scope of the PEIR because effects on special-status birds was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

In addition to the adverse effects previously discussed for osprey, Phase II treatment activities may adversely affect nesting Cooper's hawk, long-eared owl, and white-tailed kite. Although these additional species may be affected, the potential adverse effects to all special-status birds likely to occur during Phase II mechanical treatments would be

substantially similar to those described for Phase I. In addition, Phase II includes manual and herbicide treatments that are not included in Phase I. The implementation of manual and herbicide treatments would have similar effects as Phase I treatment implementation on special-status bird nests if conducted during the nesting season; both could result in disturbance, although herbicide application would not result in direct removal of nests. The same SPRs and mitigation measures included above for Phase I, including avoidance of trees with visible nests and nest buffers of at least 500 feet that would be placed around nests until the chicks have fledged as determined by a qualified RPF or biologist, would apply to avoid and minimize disturbance impacts from all Phase II treatments. However, herbicide treatments have the potential for additional adverse effects due to accidental exposure to herbicides or contamination of water sources. However, these effects would be avoided and minimized by implementation of SPR HAZ-5, SPR HAZ-6, and SPR HYD-5. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events.

Prior to Phase II treatments, the treatment area would be re-evaluated per SPR-BIO-1. If the habitat is found to be suitable for white-tailed kite nesting, the RCD would implement nest surveys per SPR-BIO-10. If no active nests are found during SPR BIO-10 surveys, then additional mitigation would not be required. However, if presence is assumed or active nests are found, then pursuant to Mitigation Measure BIO-2a, a no-disturbance nest buffer of 0.25 mile would be placed around active white-tailed kite nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF.

Habitat function for nesting white-tailed kite would be maintained after the proposed Phase II treatments because native live trees greater than 8 inches dbh would be retained, which would be the most likely features to be used by the species due to the cover provided by larger trees. If SPR BIO-1 determines that habitat is suitable for white-tailed kite, and surveys associated with BIO-10 determine that the habitat is occupied, the determination that habitat function would be maintained for white-tailed kite must be made by the RCD in consultation with CDFW, pursuant to Mitigation Measure BIO-2a. If Mitigation Measure BIO-2a is required for treatment activities, the RCD would contact CDFW to seek technical input on the determination that mortality, injury, or disturbance would not occur, and that habitat function would be maintained. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, HAZ-5, HAZ-6, and HYD-5. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on special-status birds is within the scope of the PEIR because effects on special-status birds was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to special-status birds during maintenance treatments would be substantially the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on special-status birds is within the scope of the PEIR because effects on special-status birds was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Pallid Bat

While the 2020 CZU Lightning Complex resulted in between 60 and 100 percent tree mortality within the treatment area, large live trees remain and standing snags are abundant. Large snags and remaining live trees may provide cavities for pallid bat roosting within the treatment area. Pallid bats give birth in maternity roosts and young bats may be present in these roosts from the beginning of April to the end of August.

Phase I Treatments

Phase I of the proposed project involves mechanical treatments that would be conducted within habitat suitable for pallid bats. In addition, Phase I activities are proposed to occur during the pallid bat maternity season (April 1 to August 31) and therefore, could disturb active pallid bat roosts from auditory and visual stimuli (e.g., presence of heavy equipment, vehicles, personnel). This disturbance could potentially result in abandonment of the roost and loss of young. The potential for treatment activities, including maintenance treatments, to result in adverse effects on pallid bat was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184).

If Phase I treatments would occur during the bat maternity season, then SPR BIO-10 would apply, and focused surveys for pallid bats would be conducted within suitable habitat areas before Phase I treatment activities. If pallid bat roosts are identified during focused surveys, Mitigation Measure BIO-2b for pallid bats would be implemented. Under Mitigation Measure BIO-2b, a no-disturbance buffer of 250 feet would be established around active pallid bat roosts, and treatments would not occur within this buffer. A no-disturbance buffer of 250 feet is necessary to protect sensitive roosts; this buffer size was adjusted to be larger than the general no-disturbance buffer of 100 feet provided in Mitigation Measure BIO-2b to provide adequate protection such that impacts would be less than significant under CEQA. Habitat function for special-status bats would be maintained by Phase I treatments because treatments would not result in removal of native live trees greater than 8 inches dbh, and 1 to 2 snags per acre greater than 12 inches dbh would be retained within the treatment area. SPRs applicable to this impact are BIO-1, BIO-2, and BIO-10. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on pallid is within the scope of the PEIR because effects on pallid bat was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential effects on pallid bats during Phase II mechanical and manual treatments would be substantially similar to the effects described for Phase I. Phase II also includes herbicide treatments that are not included in Phase I. Herbicide treatments could also disturb pallid bat roosts if active roosts are present; the same SPRs and mitigation measures, including buffers, would apply to avoid and minimize disturbance impacts. However, herbicide treatments have the potential for additional adverse effects due to accidental exposure to herbicides or contamination of water sources, which would be avoided and minimized by implementation of SPR HAZ-5, SPR HAZ-6, and SPR HYD-5. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent application to non-target vegetation by overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, HAZ-5, HAZ-6, and HYD-5. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on pallid bat is within the scope of the PEIR because effects on pallid bat was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to pallid bats during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on pallid is within the scope of the PEIR because effects on pallid bat was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Mountain Lion

Mountain lions have been documented to occur throughout the Santa Cruz Mountains. However, due to the close proximity to Last Chance Road and associated human development, the treatment area itself is not likely to be used as nursery habitat (Yovovich pers. comm. 2021). In addition, the 2020 CZU Lightning Complex burned any understory thickets that previously existed in treatment area that could have been used as nursery habitat. However, nursery habitat may occur adjacent (within 2,000 feet) to the treatment area in stands that may have been subject to lower intensity wildfire and are more distant from Last Chance Road. Mountain lions may use the treatment area as foraging habitat year-around.

Phase I Treatments

Phase I of the proposed project involves mechanical treatments that would be conducted within foraging habitat for mountain lions, and foraging mountain lions may use the treatment area during project implementation. However, work would not occur during the period of dusk to dawn when mountain lions are most active. In addition, foraging mountain lions are also likely to avoid the area while treatments are actively being performed due to increased noise from equipment. Furthermore, SPR BIO-2 would require biological resources training for workers and would instruct workers to stop work and allow wildlife, including mountain lion, to leave the area unharmed. While it is unlikely that mountain lions would den within the treatment area, nurseries may occur close enough (within 2,000 feet) that denning lions could be disturbed by mechanized treatments and manual treatments using chainsaws. This disturbance of denning lions could result in interrupted provisioning of cubs or the movement of cubs to another location, which could have adverse effects on the cubs. The potential for treatment activities, including maintenance treatments, to result in adverse effects on burrowing or denning special-status wildlife, which includes mountain lion was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184).

Pursuant to SPR BIO-10, the RCD would assume presence of mountain lion, and Mitigation Measure BIO-2a would be required. Pursuant to Mitigation Measure BIO-2a, and because this species is a candidate for listing under CESA and is likely to be present year-around in the treatment area, the RCD must consult with CDFW about its determination that mortality, injury, or disturbance would not occur, and that habitat function would be maintained. For the reasons summarized in the previous paragraph, the RCD determined that habitat function for mountain lion would be maintained after the implementation of Phase I treatment and contacted CDFW to seek technical input on this determination, as required. On January 21, 2022, the RCD sent a memo to Robynn Swan of CDFW describing the measures that would be taken to avoid injury or mortality and maintain habitat function in compliance with Mitigation Measure BIO-2a (See Appendix C). On February 4, 2022, RCD staff discussed the measures with Robynn Swan via conference call, and later that day CDFW concurred by email with the proposed measures. Based on this consultation with CDFW, project specific refinements of Mitigation Measure BIO-2a will be implemented by the RCD. These refinements include a detailed habitat analysis of potential denning habitat within 2,000 feet of the treatment area and, if it is determined that suitable denning habitat is present, nursery surveys and a no-disturbance buffer around any nurseries that are identified would be implemented. Habitat function for hunting mountain lions would be maintained after Phase I treatments because treatment activities would retain native live trees greater than 8 inches dbh, logs greater than 12 inches in diameter (approximately 10 tons per acre), and a portion of the native shrubs, which would provide cover for hunting and habitat and forage for prey species. SPRs applicable to this impact are BIO-1, BIO-2, and BIO-10. Mitigation Measure BIO-2a is also applicable to this impact.

This impact on mountain lion is within the scope of the PEIR because effects on burrowing or denning special-status wildlife, which includes mountain lion was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II mechanical and manual treatment activities that use mechanized tools would have substantially similar adverse effects on mountain lion as Phase I treatments and the same SPRs and mitigation measures would be applied to avoid and minimize adverse effects. Herbicide treatments are not anticipated to have adverse effects because

herbicide application would be conducted by hand with small crews that would not produce the same amount of noise and disturbance as mechanical treatment or manual treatments that use mechanized tools, and as such survey and buffer requirements would not apply to herbicide application activities. However, herbicide application has the potential for additional adverse effects due to accidental exposure to herbicides or contamination of water sources, which would be avoided and minimized by implementation of SPR HAZ-5, SPR HAZ-6, and SPR HYD-5. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent application to non-target vegetation by overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, HAZ-5, HAZ-6, and HYD-5. Mitigation Measure BIO-2a is also applicable to this impact.

This impact on mountain lion is within the scope of the PEIR because effects on burrowing or denning special-status wildlife, which includes mountain lion was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to mountain lion during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on mountain lion is within the scope of the PEIR because effects on burrowing or denning special-status wildlife, which includes mountain lion was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Ringtail

Ringtail is a nocturnal species and typically occurs in riparian areas, forests (including stands of various ages), and shrub habitats. Potential denning or resting habitat includes large hardwoods, large conifers, snags, rock outcrops, crevices, brush, and slash piles. The ringtail breeding season occurs from February through June but peaks in March and April. Gestation is approximately 51 to 54 days, and females typically give birth to two to four kits from late-April or May to June. Once the kits are mobile, female ringtails will move to different dens with the kits.

Phase I Treatments

Phase I mechanical treatments could result direct removal of ringtail dens, injury or mortality of individuals, and indirect adverse effects from noise and human/mechanical disturbance on denning ringtail. The potential for treatment activities, including maintenance treatments, to result in adverse effects on ringtail was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184). Per SPR BIO-1, if it is determined that adverse effects on special-status species can be clearly avoided by physically avoiding the suitable habitat or by conducting treatments outside of the season when a sensitive resource is present, then no additional action would be required. However, because ringtail could be present in multiple locations within the treatment area year-around, there is no feasible way to avoid all potentially suitable habitat for these species during implementation of Phase I treatments. Pursuant to SPR BIO-10, the RCD would assume presence of ringtail, and Mitigation Measure BIO-2a would be required.

Pursuant to Mitigation Measure BIO-2a, and because ringtail is a fully protect species under the California Fish and Game Code and is likely to be present year-around in the treatment area, the RCD must consult with CDFW about its determination that mortality, injury, or disturbance would not occur, and habitat function would be maintained. For the reasons summarized below, the RCD determined that implementation of Phase I treatments would maintain habitat function for ringtail and contacted CDFW to seek technical input on this determination and refinements to BIO-2a to avoid injury or morality to the species, as required. On January 21, 2022, the RCD sent a memo to Robynn Swan of CDFW describing the measures that would be taken to avoid injury or mortality and maintain habitat function in

compliance with Mitigation Measure BIO-2a (See Appendix C). On February 4, 2022, RCD staff discussed the measures with Robynn Swan, and later that day the CDFW concurred by email with the proposed measures.

Based on this consultation with CDFW, project-specific refinements of Mitigation Measure BIO-2a have been developed and will be implemented by the RCD. Under project specific refinements to Mitigation Measure BIO-2a, focused surveys for ringtail dens within the treatment area would be conducted by a qualified biologist within 7 days before implementation of all Phase I mechanical treatments conducted in the maternity season (April 15 – June 30) to determine whether active ringtail dens are present. If active dens are observed during focused surveys, a no-disturbance buffer of at least 0.25 mile would be established around active ringtail dens, and no treatment activities would occur within this buffer during the maternity season. In addition, CDFW will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer. If active ringtail dens are not discovered during the focused surveys, daily sweeps of the treatment area will be conducted before the start of treatment activities for the day. If an active den is discovered during daily sweeps, a no-disturbance buffer will be applied and CDFW notified as discussed for focused surveys.

Mitigation Measure BIO-2a would be further refined as follows for Phase I mechanical treatments that occur outside of the maternity season. Heavy machinery activities will be conducted slowly and cautiously. For example, the head of a masticator will pause above a patch of heavy brush for several seconds before removing the brush, or a feller-buncher will pause next to a snag with a cavity before removing the snag. A qualified RPF or biologist will explain this process to contractors and will observe mechanical treatments on the first day of work to ensure that the methods are understood and implemented properly; this could be combined with other pre-activity survey or contractor awareness training requirements. Contractors will watch for ringtail as they masticate in heavy brush or remove snags with cavities. If a ringtail is observed, the contractor will direct treatment activities to halt, and the ringtail will be allowed to leave the area unharmed before treatment begins. If a ringtail is observed outside of maternity season, the qualified RPF or biologist will be contacted and will perform a sweep of the treatment area before work resumes. If the qualified RPF or biologist observes a resting ringtail or active non-maternity den, treatment activities will not occur within that day's treatment area until the ringtail leaves the area on its own. If the qualified RPF or biologist observes a ringtail or confirms the contractor's observation (i.e., based on contractor description or photograph), the occurrence will be reported to CDFW.

The proposed Phase I treatment is not expected to result in long term adverse effects on habitat for ringtail because native live trees greater than 8 inches dbh would not be removed. In addition, habitat features would be retained (Mitigation Measure BIO-2a), such as downed wood greater than 12 inches in diameter (approximately 10 tons per acre), 1-2 snags greater than 12 inches dbh per acre, and a portion of native shrubs would be retained within the treatment area. SPRs applicable to this impact are BIO-1, BIO-2, and BIO-10. Mitigation Measure BIO-2a is also applicable to this impact.

This impact on ringtail is within the scope of the PEIR because effects on ringtail was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential effects on ringtail during Phase II mechanical and manual treatments that use mechanized tools (e.g., chainsaws) would be substantially similar to those described for Phase I and the same SPRs and mitigation measures, including den buffers, would apply to avoid and minimize disturbance impacts. Herbicide treatments are not anticipated to have adverse effects because the noise and disturbance would be far less than those for mechanical treatments and manual treatments that use mechanize tools, and as such survey and buffer requirements would not apply to Phase II herbicide treatments. However, herbicide treatments have the potential for additional adverse effects due to accidental exposure to herbicides or contamination of water sources, which would be avoided and minimized by implementation of SPR HAZ-5, SPR HAZ-6, and SPR HYD-5. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and

waterways, use of dye in herbicides to avoid inadvertent application to non-target vegetation by overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, HAZ-5, HAZ-6, and HYD-5. Mitigation Measure BIO-2a is also applicable to this impact.

This impact on ringtail is within the scope of the PEIR because effects on ringtail was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to ringtail during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on ringtail is within the scope of the PEIR because effects on ringtail was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

American Badger

American badger is most often found in open stages of shrub, woodland, and herbaceous habitats and digs burrows for shelter and reproduction (CWHR 1990). Within maternity dens, pups are present between mid-February and early July. The forest within the treatment area was likely too dense before the 2020 CZU Lightning Complex to be suitable habitat for the species. However, with the high tree mortality caused by the fire, the habitat within the treatment area is likely to become more open and suitable for the species after Phase I treatments are implemented.

Phase I Treatments

The existing habitat within the treatment area is not suitable for American badger due to the density of standing dead trees that exist throughout much of the treatment area. Therefore, there is no potential to negatively affect American badger during Phase I of the project and this impact does not apply to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The treatment area during Phase II treatments is anticipated to be more open forest and woodland like, and therefore, potentially suitable habit for American badger. Phase II mechanical treatments and manual treatments that use mechanical tools (e.g., chainsaws) could result in disturbance of American badger dens. While herbicide treatments are not anticipated to result in den disturbance, potentially adverse impacts from exposure to herbicides could occur. The potential for treatment activities, including maintenance treatments, to result in adverse effects on American badger was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184).

If Phase II mechanical and manual treatments that use mechanical tools would occur during the American badger pupping season (February 15 – July 1), then SPR BIO-10 would apply, and focused surveys for American badger dens would be conducted within suitable habitat areas prior treatment activities. If American badger are identified during focused surveys, Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, a no-disturbance buffer of 100 feet would be established around active maternity dens, and treatments would not occur within this buffer. In addition, the potential for additional adverse effects from herbicide treatments due to accidental exposure to herbicides or contamination of water sources would be avoided and minimized by implementation of SPR HAZ-5, SPR HAZ-6, and SPR HYD-5. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent application to non-target vegetation by overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. Habitat function for American badger would be maintained after Phase II treatments because treatments would retain approximately 10 tons per acre of existing

downed logs greater than 12 inches in diameter, and a portion of shrubs within the treatment area, which would provide cover and forage for prey species. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, HAZ-5, HAZ-6, and HYD-5. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on American badger is within the scope of the PEIR because effects on American badger was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to American badger during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on American badger is within the scope of the PEIR because effects on American badger was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

San Francisco Dusky-Footed Woodrat

Potentially suitable habitat for San Francisco dusky-footed woodrat is present within the treatment area. Woodrats construct nests, which are also known as houses or middens, with shredded grass, leaves, and other material. Woodrats use these nests during the breeding season and outside of the breeding season. The treatment area was burned in 2020 during the CZU Lighting Complex, and it is likely that all nests in the area were destroyed. However, woodrat populations can recover less than one year following low intensity fire (Vreeland and Tietje 1998). While the 2020 CZU Lightning Complex was not a low intensity fire, woodrats could have recolonized the treatment area from nearby stands where the fire was lower intensity or where it did not burn.

Phase I Treatments

Phase I treatments may result in inadvertent disturbance to, injury to, or mortality of individual woodrats or destruction of nests through mechanical treatment activities. If present, San Francisco dusky-footed woodrats could be disturbed due to the presence of equipment and personnel and could be inadvertently injured or killed or have their nests destroyed by heavy machinery, personnel, or vehicles. The potential for treatment activities, including maintenance treatments, to result in adverse effects on San Francisco dusky-footed woodrat was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-138 to 3.6-184).

Per SPR BIO-1, if it is determined that adverse effects on special-status species can be clearly avoided by physically avoiding the suitable habitat or by conducting treatments outside of the season when a sensitive resource is present, then no additional action would be required. Because woodrats may be present within the treatment area and use their nests year-around, there is no reliable season during which impacts on this species could be avoided. As a result, SPR BIO-10 would apply, and focused surveys for San Francisco dusky-footed woodrats would be conducted within suitable habitat before implementation of Phase I treatments. If woodrat nests are not detected within the treatment area during focused surveys, then mitigation for the species would not be required. If woodrat nests are detected during focused surveys, then Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, a no-disturbance buffer of 100 feet would be established around active woodrat nests during the breeding season (April through mid-July) to prevent accidental encroachment by vehicles, equipment, or personnel. If woodrat nests within treatment area cannot be avoided by 100 feet, a qualified biologist will implement nest relocation procedures outside of the woodrat breeding season. The qualified biologist would determine whether the nest is active through live-trapping and would dismantle the woodrat nest by hand, and rebuild the nest outside of the treatment area footprint. Habitat function for San Francisco woodrat would be maintained by Phase I treatments because treatments would retain approximately 10 tons per acre of logs greater than 12 inches in diameter and a portion of shrubs within the treatment area, which would provide cover and forage habitat. SPRs applicable to this impact are BIO-1, BIO-2, and BIO-10. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on San Francisco dusky-footed woodrat is within the scope of the PEIR because effects on San Francisco dusky-footed woodrat was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II mechanical treatments and manual treatment activities that include power equipment would have substantially the same adverse effect on San Francisco woodrat as Phase I treatments, and the same SPRs and mitigation measures would be applied to avoid and minimize impacts. While herbicide treatments are not anticipated to result in disturbance of woodrats or nests, herbicide treatments have the potential for adverse effects due to accidental exposure to herbicides or contamination of water sources, which would be avoided and minimized by implementation of SPR HAZ-5, SPR HAZ-6, and SPR HYD-5. SPR HAZ-5 and SPR HAZ-6 require safe handling of herbicides (e.g., spill prevention, spill response) and compliance with current regulations for the application of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent application to non-target vegetation by overspray, restrictions on application in windy conditions, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-10, HAZ-5, HAZ-6, and HYD-5. Mitigation Measure BIO-2b is also applicable to this impact.

This impact on San Francisco dusky-footed woodrat is within the scope of the PEIR because effects on San Francisco dusky-footed woodrat was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects on San Francisco woodrat during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs and mitigation measures would apply. This impact on San Francisco dusky-footed woodrat is within the scope of the PEIR because effects on San Francisco dusky-footed woodrat was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT BIO-3

Sensitive habitats analyzed in this PSA include sensitive natural communities as defined by CDFW (CDFW 2021), Environmentally Sensitive Habitat Areas (ESHA) as defined by the Coastal Act Section 30107.5, and habitats identified as sensitive by the Santa Cruz County Local Coastal Program (LCP) (Santa Cruz County 1994). The LCP includes the following sensitive habitats that occur within Santa Cruz County: kelp beds, rocky intertidal areas, marine mammal hauling grounds, shorebird nesting areas, seabird and shorebird resting and roosting sites, dunes and coastal strand, cliff nesting areas, coastal scrub, wetlands, rivers and streams, intermittent wetlands, reservoirs and ponds, Santa Cruz long-toed salamander habitat, Santa Cruz cypress groves, San Andreas live oak woodland, maritime chaparral, indigenous ponderosa pine forest, indigenous Monterey pine forest, and grassland in the coastal zone.

Review of the Fire and Resource Assessment Program FVEG vegetation mapping of the treatment area from before the 2020 CZU Lightning Complex determined that the vegetation types in the treatment area were closed-cone pine-cypress (3.7 acres), montane hardwood-conifer (38.8 acres), and redwood (16.4 acres). No riparian habitat was identified using FVEG. Using Table 3.6-3 in Volume II of the Final CalVTP PEIR, the following CDFW sensitive natural communities could occur in the treatment area based on the vegetation types in the FVEG mapping: Sargent cypress woodland, Monterey pygmy cypress stand, Monterey cypress stand, Bishop pine – Monterey pine forest, Santa Lucia fir grove, bigleaf maple forest, and redwood forest.

A reconnaissance-level survey of the treatment area was conducted pursuant to SPR BIO-1 on October 20, 2021. During this reconnaissance-level survey, it was observed that the entire treatment area had been burned by the 2020 CZU Lightning Complex, resulting in between 60 and 100 percent mortality of all tree species. No living Douglas fir, tanoak, or Monterey pine trees were observed, and mortality of these species is estimated to be between 95 and 100 percent. However, Monterey pine seedlings that have established since the fire are present in portions of the treatment area. In addition, redwood, madrone, and coast live oak were observed resprouting from trunks and large branches. While coast live oak, madrone, and tanoak were observed within the treatment area, these species are not dominant in the treatment area.

Based on species ranges, occurrence data, vegetation mapping, and the reconnaissance-level survey of the treatment area, the following sensitive habitats (as identified in Coastal Act Section 30107.5, the LCP, and CalVTP PEIR) are not present within the treatment area: kelp beds, rocky intertidal areas, marine mammal hauling grounds, shorebird nesting areas, seabird and shorebird resting and roosting sites, dunes and coastal strand, cliff nesting areas, rivers, reservoirs and ponds, Santa Cruz long-toed salamander habitat, Santa Cruz cypress groves, San Andreas live oak woodland, maritime chaparral, indigenous ponderosa pine forest, grassland in the coastal zone, Sargent cypress woodland, Monterey pygmy cypress stand, Monterey cypress stand, and Santa Lucia fir grove.

While bigleaf maple (*Acer macrophyllum*) was not observed during reconnaissance-level surveys that occurred post fire, this species could have occurred in the treatment areas pre-fire and if so, may have begun to re-establish and could establish in the future. Wetlands within the Coastal Zone may be delineated by a single wetland parameter (e.g., wetland hydrology) rather than the three parameters required to meet the state or federal definition of a wetland. Wetlands that can be delineated by a single parameter are identified as sensitive habitats pursuant to the Coastal Act, and the headwaters of the intermittent drainage that has been documented to occur within the treatment area likely meets this definition. Aquatic resources that meet the state or federal definitions of wetlands are addressed in Impact BIO-4 below.

Sensitive habitats and sensitive natural communities that are known to occur or may have occurred in the treatment area before the fire are listed in Table 4.5-2 below.

Table 4.5-2 Sensitive Habitats and Natural Communities Documented or with Potential to Occur in the Treatment Area

Sensitive Habitat/Sensitive Natural Community[1]	Rarity Rank	CWHR Type	Occurrence Potential
Redwood Forest	S3	Redwood	Known to Occur
Bigleaf Maple Forest	S3	Montane Hardwood Conifer	May Occur
Douglas fir-tanoak forest	S3	Douglas fir	May Occur
indigenous Monterey pine forest (Bishop pine – Monterey pine forest)	S3	Closed-Cone Pine-Cypress	Known to Occur
Wetland (Coastal Zone)	NA	NA	Known to Occur

1 These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable), or designated as sensitive habitats in the LCP.

Source: CNPS 2021b, Compiled by Ascent Environmental in 2021

The 2020 CZU Lightning Complex burned through much of the Ano Nuevo Stand of Monterey pine in Santa Cruz and San Mateo Counties. This is one of three native Monterey pine stands in California and expected mortality rates across the majority of the stand are expected to be 50-100 percent based on burn severity. While the natural communities in Table 4.5-2 were documented or may have been present pre-fire, the species composition and structure that define these communities have been catastrophically altered by the fire. It is not known if some of these communities will re-establish naturally for many years (e.g., Douglas fir-tanoak forest) due to the potential loss of seedbank, few surviving mature plants to disperse seeds into the burned area, and relatively slow growth rates of some of the dominant or characteristic woody species. However, it is possible sensitive natural communities could re-establish naturally during the lifetime of this PSA, which has no expiration date under CEQA. The timing of potential

re-establishment is uncertain and would occur at different rates for different communities. For example, big leaf maple, which has large seeds with limited dispersal range, may grow up to just over 6 feet in a single season before growth slows (USFS 2022), while growth rates for Douglas fir, which may disperse better due to smaller seeds, grow initially slower at 2.5 to 3.5 inches in the first year, accelerating after 5-10 years to 3 feet per year (University of California 2022). In addition, these communities may be preceded by earlier seral stages dominated by faster establishing herbaceous and woody vegetation. For example, transitional shrub-dominated communities may establish and persist for several years before trees grow large enough to surpass the shrub layer and become dominant. Because sensitive natural communities, although altered by the 2020 CZU Lightning Complex, are known to occur or may have occurred in the treatment area, and due to the presence of suitable habitat for multiple special-status species within the treatment area (e.g., Monterey pine, California red-legged frog) it is assumed that the treatment area can be defined as ESHA, according to Coastal Act Section 30107.5. For discussion of how habitat will be maintained for special-status species, see Impact BIO-2 above.

The proposed project would facilitate the restoration of sensitive natural communities by removing the large numbers of dead and dying trees caused by the 2020 CZU Lighting Complex, which would increase the health of remaining live trees within the treatment area by creating space for them to grow and opening the canopy to allow light to penetrate. In addition, treatments would facilitate the natural regeneration of the indigenous Monterey pine forest. Prior to the 2020 CZU Lighting Complex, indigenous Monterey pine forest had been encroached upon by Douglas fir due to a history of fire suppression in the treatment area, which altered the natural fire regime. The encroachment of Douglas fir inhibited natural Monterey pine seedling growth and establishment and fire suppression prevented recruitment of new seedlings because this species requires fire to release seeds from its closed cones and seeds require exposed soil to germinate. The desired condition following treatment would be re-establishment of redwood forest and Monterey pine forest at historical densities within the treatment area.

Phase I Treatments

As explained above, due to the 2020 CZU Lightning Complex, the sensitive natural communities that are known to have occurred or may have occurred in the treatment area were catastrophically altered. However, those communities are still present or may still be present in an altered state such that they are unable to physically present the species composition and structure that is characteristic of the sensitive natural community type at maturity. Therefore,, the entirety of the treatment area likely qualifies as ESHA.

The proposed mechanical treatments and biomass disposal during Phase I could result in direct or indirect adverse effects on riparian habitat or other sensitive natural communities. The potential for treatment activities to result in adverse effects on riparian habitat or other sensitive natural communities was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-1186 to 3.6-191). During Phase I treatments, the project would focus on removing dead and dying vegetation and would retain native live trees greater than 8 inches dbh (see Section 2, "Project Description") within the previously burned treatment area. This treatment would increase the growth and vigor of any remaining live trees (Skovsgaad 2009) and would provide ideal conditions for the natural recruitment of Monterey pine, while reducing fuel loads to protect the regeneration of other native vegetation and improve conditions for the re-establishment of redwood forest community. The potential presence of Douglas fir-tanoak forest and bigleaf maple forest in the treatment area is due to the history of fire suppression prior to the 2020 CZU Lightning Complex and encroachment of Douglas fir and Montane Hardwood Conifer Forest into an area that was historically characterized by indigenous Monterey pine stands. The implementation of Phase I treatments would not result in conversion of sensitive natural communities due to the focus on removal of dead and dying vegetation. In addition, the removal of live small diameter (less than 8-inch dbh) big leaf maple, Douglas fir, and tanoak could occur, to facilitate the re-establishment of the historically indigenous Monterey pine, which is representative of appropriate native habitat within the treatment area. Therefore, Phase I would not have a substantial adverse direct or indirect effect on sensitive habitats or sensitive natural communities within the treatment area. Furthermore, to identify sensitive natural communities present within the treatment area, a qualified biologist or botanist would survey and map habitats as required under SPR BIO-3. SPR BIO-3 requires a qualified biologist to conduct a survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" before the start of treatment activities (CDFW 2018). In addition, the RCD would implement SPR BIO-8 to identify and avoid or minimize impacts in ESHA,

which requires consultation with the CCC or local government with an LCP, compliance with the LCP, and limitations on treatment actions, monitoring, and buffers around ESHA if appropriate. Implementation of SPR HYD-4 would avoid impacts to Coastal Act-defined wetlands that occur in the treatment area by establishing WLPZs ranging from 50 to 100 feet adjacent to any Class II streams within the treatment area, and WLPZs sufficient to prevent the degradation of downstream beneficial uses of water would be established around all Class III ephemeral streams within the treatment area. SPRs applicable to this impact are BIO-1, BIO-2, BIO3, BIO-6, BIO-8, BIO-9, and HYD-4.

This impact on riparian habitat or other sensitive natural communities is within the scope of the PEIR because the affected sensitive natural communities were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The proposed mechanical and manual treatments, herbicide application, and biomass disposal during Phase II could result in direct or indirect adverse effects on riparian habitat or other sensitive natural communities. During Phase II treatments, the RCD would selectively thin the naturally re-establishing Monterey pine saplings within indigenous Monterey pine forest portions of the treatment area to facilitate establishment of healthy and mature native Monterey pine stands, with few to no interlocking crowns, and a managed understory with minimal ladder fuels. Also, successional vegetation along the road would be managed as it establishes to facilitate the selective growth of certain native vegetation that would comprise a shaded fuel break (see Chapter 2, "Project Description"). In addition, the RCD would retain all live native trees greater than 8 inches dbh and remove invasive vegetation within the treatment area. This would facilitate re-establishment of indigenous Monterey pine forest within the treatment area at densities that reflect historic conditions. Additionally, implementation of Phase I could facilitate the establishment or re-establishment of other sensitive natural communities and habitats before Phase II.

To identify any sensitive natural communities within the treatment area that have established before Phase II treatments, a qualified biologist or botanist would survey and map habitats as required under SPR BIO-3 as discussed for Phase I above. In addition, it is assumed that the entire treatment area is ESHA and impacts to ESHA would be minimized or avoided by the implementation of SPR BIO-8. As discussed in Phase I above, the removal of live big leaf maple, Douglas fir, and tanoak less than 8-inch dbh could occur through implementation of Phase II treatments. This would facilitate the restoration of indigenous Monterey pine stands that occupied the treatment area prior to the encroachment of Douglas fir and Montane Hardwood Forest that resulted from historic fire suppression. Therefore, while Phase II treatments may result in alteration of species composition within sensitive natural communities, the result would be representative of appropriate native habitat in the treatment area and a naturally occurring sensitive natural community (i.e., Monterey pine forest) under a more natural disturbance regime. In redwood stands, live and resprouting redwood trees would not be removed during Phase II treatments; therefore, the redwood forest community would be maintained in the portions of the treatment area where it occurs. SPR HYD-4 requires the establishment of WLPZs ranging from 50 to 100 feet adjacent to any Class II streams, and WLPZs sufficient to prevent the degradation of downstream beneficial uses around all Class III ephemeral streams. Therefore, implementing SPR HYD-4 would avoid impacts to Coastal Zone-defined wetlands in the treatment area. Other SPRs would be applied to further reduce the likelihood of adverse effects including implementation of SPR HAZ-5, HAZ-6, and HYD-5. SPR HAZ-5 and HAZ-6, which require safe handling of herbicides (e.g., according to a spill prevention and spill response plan) and compliance with current regulations for the transport, handling, application, and disposal of herbicides. SPR HYD-5 requires herbicide mixing sites be located away from non-target vegetation and waterways, use of dye in herbicides to avoid inadvertent overspray, measures to minimize herbicide drift and runoff to non-target areas, and restrictions on application during precipitation events. SPRs applicable to this impact are BIO-1, BIO-2, BIO-3, BIO-6, BIO-8, BIO-9, HAZ-5, HAZ-6. HYD-4, and HYD-5. This impact on riparian habitat or other sensitive natural communities is within the scope of the PEIR because the affected habitats and sensitive natural communities were covered in the PEIR, and the proposed treatment activities and intensity of disturbance from implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential for adverse effects to sensitive natural communities and other sensitive habitats during maintenance treatments would be substantially the same as those discussed for Phase I and Phase II treatments, and the potential for maintenance activities to result in adverse effects on sensitive habitats was examined in the PEIR. The same SPRs would apply to maintenance treatments as discussed for Phase I and Phase II treatments. This impact on riparian habitat or other sensitive natural communities is within the scope of the PEIR because the affected special-status salamander species were covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

COASTAIMPACT BIO-4

Phase I Treatments

Phase I mechanical treatments and chipping and masticating of biomass could have an adverse effect on state or federally protected wetlands. The potential for treatment activities to result in adverse effects on state or federally protected wetlands was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-191 to 3.6-192). Most of the aquatic habitat in the vicinity of the treatment area has been excluded during delineation of the treatment area. However, based on review and survey of project-specific biological resources (SPR BIO-1), one portion of the treatment area may contain a small segment of an intermittent stream, and ephemeral drainages may be present in other locations within the Phase I treatment area. To avoid and minimize adverse effects on state or federally protected wetlands, SPR HYD-1 would be implemented, which requires treatments to comply with applicable water quality requirements adopted by the appropriate Regional Water Quality Control Board (RWQCB) and approved by the State Water Resources Control Board (SWRCB). The SWRCB is requiring all projects utilizing the CalVTP PEIR to follow the requirements of their Vegetation Treatment General Order, which would meet the requirements of SPR HYD-1. Users of the CalVTP PSA process are automatically enrolled in the general order and are required to implement all applicable SPRs and mitigation measures from the CalVTP PEIR. In addition, the general order requires project proponents to comply with any applicable Basin Plan prohibitions. In addition, under SPR HYD-4, WLPZs ranging from 50 to 100 feet would be established adjacent to any Class II streams within the treatment area, and WLPZs sufficient to prevent the degradation of downstream beneficial uses of water would be established around all Class III ephemeral streams within the treatment area. Establishment of WLPZs would avoid all state or federally protected wetlands. SPRs applicable to this impact are BIO-1, BIO-2, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HYD-1, and HYD-4.

This impact on state or federally protected wetlands is within the scope of the PEIR because effects on state or federally protected wetlands was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential impact to state or federally protected wetlands during Phase II treatments would be substantially similar to those discussed for Phase I treatments above, with the addition of potential indirect impacts from herbicide application. In addition to implementation of the SPRs discussed above for Phase I, SPR HAZ-5, which requires a spill prevention and response plan, and SPR HAZ-6, which requires compliance with herbicide application regulations, would be implemented to avoid and minimize indirect adverse effects to state or federally protected wetlands during herbicide use. SPRs applicable to this impact are BIO-1, BIO-2, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HYD-1, HYD-4, HAZ-5, and HAZ-6.

This impact on state or federally protected wetlands is within the scope of the PEIR because effects on state or federally protected wetlands was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential impact to state or federally protected wetlands during maintenance treatments would be the same as those discussed for Phase II treatments, and the same SPRs would apply. This impact on state or federally protected wetlands is within the scope of the PEIR because effects on state or federally protected wetlands was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT BIO-5

Based on review of the Bay Area Critical Linkage Project mapping (Bay Area Conservation Network 2019), the treatment area provided habitat connectivity for terrestrial wildlife species to move between the Scott Creek and Waddell Creek watersheds before the 2020 CZU Lightning Complex. However, this habitat connectivity for some terrestrial wildlife species may have been altered by the fire, which reduced canopy and understory cover within the treatment area.

Phase I Treatments

Phase I mechanical treatments could result in adverse effects on wildlife movement corridors and nursery sites. The potential for treatment activities to result in adverse effects on wildlife movement corridors and nursery sites was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-192 to 3.6-196). Phase I treatments would not remove live trees greater than 8 inches dbh, would retain approximately 10 tons per acre of logs greater than 12 inches in diameter, and would retain a portion of native shrubs Therefore, implementation of Phase I treatments would not result in a substantial change in the existing conditions that facilitate wildlife movement in treatment area. No roads or other permanent barriers to wildlife movement would be constructed by the project. Additionally, no known wildlife nursery sites or indications of nursery sites, such as deer fawning habitat or potential rookery trees with whitewash, were identified within the treatment area during implementation of SPR BIO-1. However, the natural habitat within treatment area may be used for movement (e.g., mule deer migration) and cover for common wildlife species. SPR BIO-1 is the only measure applicable to this impact.

This impact on wildlife movement corridors and nursery sites is within the scope of the PEIR because effects on wildlife movement corridors and nursery sites was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential effects on wildlife movement and nursery sites during Phase II treatments would be substantially the same as those discussed for Phase I treatments above, with the addition of potential indirect impacts from herbicide application. In addition to implementation of SPR HYD-1 discussed above; SPR HAZ-5, which requires a spill prevention and response plan; and SPR HAZ-6, which requires compliance with herbicide application regulations would be implemented to avoid and minimize indirect adverse effects to state or federally protected wetlands during herbicide use. In addition, after Phase I and before Phase II treatments, the treatment area is anticipated to provide improved conditions for connectivity when compared to the existing post fire condition, due to the removal of dead and dying vegetation, retention of 10 tons per acre of logs greater than 12 inches in diameter, and retention of a portion of native shrubs. Therefore, implementation of Phase II treatments would not result in a substantial change in

the conditions that facilitate wildlife movement in treatment area. SPRs applicable to this impact are BIO-1, HYD-1, HAZ-5, and HAZ-6.

This impact on wildlife movement corridors and nursery sites is within the scope of the PEIR because effects on wildlife movement corridors and nursery sites was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential effects on wildlife movement and nursery sites during maintenance treatments would the substantially the same as those discussed for Phase I and Phase II treatments, and the same SPRs would apply. This impact on wildlife movement corridors and nursery sites is within the scope of the PEIR because effects on wildlife movement corridors and nursery sites was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT BIO-6

The treatment area for the Last Chance Road Forest Health Project was burned during the 2020 CZU Lighting Complex and the majority of trees were killed in that fire, leaving little if any intact canopy in the treatment area for tree nesting birds. However, the trees that remain alive (e.g., redwood, madrone, coast live oak) will continue to resprout and may provide enough canopy foliage for tree nesting birds in the near future. Cavity nesting birds may utilize the existing standing dead trees within the treatment area, and habitat is also currently present for ground and shrub nesting species. Vegetation treatments could result in direct or indirect adverse effects resulting in reduction of habitat or abundance of common wildlife, including nesting birds, because habitat suitable for these species is present throughout treatment area.

Phase I Treatments

Phase I treatments are planned to occur during the nesting bird season (February 1–August 31); therefore, mechanical treatments that occur during Phase I could result in direct loss of active nests or disturbance to active nests of cavity, ground, and shrub nesting species from auditory and visual stimulus (e.g., heavy equipment, vehicles, personnel), potentially resulting in abandonment and loss of eggs or chicks. The potential for treatment activities to result in adverse effects on habitat or abundance of common wildlife was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.6-197 to 3.6-198). For this reason, SPR BIO-12 would apply, and a survey for common nesting birds would be conducted within the treatment area by a qualified RPF or biologist before treatment activities. If no active bird nests are observed during focused surveys, then additional measures would not be required. If active nests of common birds or raptors are observed during focused surveys, disturbance to the nests would be avoided by modifying treatments to avoid disturbance to the nests, deferring treatment until the nests are no longer active as determined by a qualified biologist, or establishing an appropriate buffer around the nests. Standard nest buffers would be 300 feet for non-raptors and 500 feet for raptors. Buffers may be modified by a qualified biologist based on rationale such as species sensitivity, vegetative cover, nest height, and topography that would attenuate noise and visual disturbance and may be reduced to a minimum of 100 feet. In addition, trees with visible nests will be retained, whether or not the nests occupied. SPRs applicable to this impact are BIO-1 and BIO-12.

This impact on habitat or abundance of common wildlife is within the scope of the PEIR because effects on habitat or abundance of common wildlife was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

The potential impact to common nesting birds during Phase II treatments would be substantially the same as those discussed for Phase I treatments above, with the addition of potential direct and indirect impacts to tree nesting species as the canopy of trees that survived the 2020 CZU Lightning Complex continues to resprout. SPR BIO-12 would be applied to any Phase II treatments that occur within the nesting season (February 1–August 31). SPRs applicable to this impact are BIO-1 and BIO-12.

This impact on habitat or abundance of common wildlife is within the scope of the PEIR because effects on habitat or abundance of common wildlife was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

The potential impact to common nesting birds during maintenance treatments would be the same as those discussed for Phase II treatments above, and SPR BIO-12 would be applied to any maintenance treatments that occur within the nesting season (February 1–August 31). This impact on habitat or abundance of common wildlife is within the scope of the PEIR because effects on habitat or abundance of common wildlife was covered in the PEIR, and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT BIO-7

The proposed project will occur within the Coastal Zone of Santa Cruz County; as such, the project must comply with the provisions of the Coastal Act and relevant LCP. The RCD developed and the CCC approved a PWP as a companion to the CalVTP to provide design standards for projects in the Coastal Zone and compliance with the LCP. The project would be implemented in compliance with the PWP and would therefore not result in a conflict with the LCP. The potential for the proposed treatments to conflict with local policies is within the scope of the PEIR because vegetation treatment locations, types, and activities are consistent with those analyzed in the PEIR. In addition, all projects implemented under the CalVTP that are subject to local policies or ordinances would be required to comply with them, per SPR AD-3. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT BIO-8

This impact does not apply to the proposed project because the treatment area is not within the plan area of any adopted habitat conservation plan or natural community conservation plan. Therefore, this impact does not apply to the proposed project.

NEW BIOLOGICAL RESOURCE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined that they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.6.1, "Environmental Setting," and Section 3.6.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances are present that would give rise to any new significant impacts not addressed in the PEIR. Therefore, no new impact related to biological resources would occur that is not covered in the PEIR.

4.6 GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	LTS	Impact GEO-1, pp. 3.7-26 – 3.7-29	Yes	HYD-4 GEO-1 GEO-2 GEO-3 GEO-4 GEO-5 GEO-7 GEO-8	NA	LTS	No	Yes
Impact GEO-2: Increase Risk of Landslide	LTS	Impact GEO-2, pp. 3.7-29 – 3.7-30	Yes	GEO-3 GEO-4 GEO-8	NA	LTS	No	Yes

[1] LTS = less than significant.

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

New Geology, Soils, Paleontology, and Mineral Resource Impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.6.1 Discussion

IMPACT GEO-1

Phase I Treatments

Vegetation treatment activities during Phase I of the proposed project include mechanical treatment activities, which would involve vegetation removal and soil disturbance, which have the potential to increase rates of erosion and loss of topsoil. The potential for this treatment activity to cause substantial erosion or loss of topsoil was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.7-26 to 3.7-29). Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial erosion or loss of topsoil, especially in areas with steep slopes. The proposed project would implement mechanical treatments on the entire 60-acre treatment area, including areas where steep slopes occur, and where burn scars from the 2020 CZU Fire Complex are present. Consistent with the PEIR, SPRs GEO-1 through GEO-5, GEO-7, GEO-8, and HYD-4 and would be implemented, which would avoid and minimize the risk of substantial erosion and loss of topsoil as a result of project implementation. This impact is within the scope of the PEIR because the proposed Phase I treatment activity and intensity of

vegetation removal and potential associated soil disturbance under the proposed project is consistent with what was analyzed in the PEIR. Therefore, this impact of Phase I of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Vegetation treatment activities during Phase II of the project would include manual and mechanical vegetation removal, as well as herbicide application. Vegetation removal involved in manual and mechanical treatment would result in varying levels of soil disturbance, which have the potential to increase rates of erosion and loss of topsoil. The potential for these treatment activities to cause substantial erosion or loss of topsoil was examined in the PEIR. Mechanical treatments using heavy machinery are the most likely to cause soil disturbance that could lead to substantial erosion or loss of topsoil, especially in areas of steep slopes. Therefore, the potential impact during Phase II is the same as described above under "Phase I Treatments," and the same SPRs would apply. This impact is within the scope of the PEIR because the proposed treatment activities and intensity of vegetation removal and associated ground disturbance under the proposed project is consistent with what was analyzed in the PEIR. This impact of Phase II of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve manual and mechanical vegetation removal activities and would be the same as described under "Phase II Treatments" above. Therefore, the same potential impacts related to substantial erosion and loss of topsoil would occur, and the same SPRs would apply to maintenance activities. This impact is within the scope of the PEIR because the proposed treatment activities and intensity of vegetation removal, and associated ground disturbance that would occur under maintenance treatments is consistent with what was analyzed in the PEIR. This impact of maintenance treatments under the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT GEO-2

Phase I Treatments

Vegetation treatment activities during Phase I of the proposed project would include mechanical vegetation treatments. Vegetation removal through mechanical treatments could decrease the stability of slopes and increase the risk of landslides. The potential for mechanical treatment activities to increase landslide risk was examined in the PEIR (CalVTP Final PEIR Volume II 3.7-29 to 3.7-30). The treatment area contains steep slopes, where geomorphic features indicate that landslides have historically occurred in the area (DOC 2015).

Removing vegetation during treatments implemented under the proposed project could potentially increase the risk of landslide by removing root systems that stabilize slopes. Consistent with the PEIR, this risk is addressed with the implementation of SPRs GEO-3, GEO-4, and GEO-8, which require the stabilization of mechanically disturbed soil, erosion monitoring, and that a registered professional forester or licensed geologist evaluate treatment areas with slopes greater than 50 percent for unstable areas. This impact is within the scope of the PEIR because the extent and methods of vegetation removal and required avoidance of steep slopes and areas of instability are consistent with those analyzed in the PEIR. This impact of Phase I of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatment

Vegetation treatment activities during Phase II of the project would include manual and mechanical vegetation removal, as well as herbicide application. Vegetation removal during Phase II of the proposed project has the potential to increase the risk of landslide by removing root systems; therefore, the potential impact during Phase II is the same as described above under "Phase I Treatments," and the same SPRs would apply. This impact is within the scope of the PEIR because the proposed treatment activities and intensity of vegetation removal and associated ground disturbance under the proposed project is consistent with what was analyzed in the PEIR. This impact of

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

Maintenance Activities

Maintenance treatment activities would include mechanical and manual vegetation treatments and herbicide application, which would be the same as described under "Phase II Treatments" above. Therefore, the same potential impacts related to an increased risk of landslide would occur, and the same SPRs would apply to maintenance activities. This impact is within the scope of the PEIR because the proposed treatment activities and intensity of vegetation removal, and associated ground disturbance that would occur under maintenance treatments is consistent with what was analyzed in the PEIR. This impact of maintenance treatments under the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.7.1, "Environmental Setting," and Section 3.7.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to geology, soils, paleontology, and mineral resources would occur that is not covered in the PEIR.

4.7 GREENHOUSE GAS EMISSIONS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	Impact GHG-1, pp. 3.8-10 – 3.8-11	Yes	None	NA	LTS	No	Yes
Impact GHG-2: Generate GHG Emissions through Treatment Activities	PSU	Impact GHG-2, pp. 3.8-11 – 3.8-17	Yes	NA	None	SU	No	Yes

[1] LTS = less than significant; PSU = potentially significant and unavoidable.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.7.1 Discussion

IMPACT GHG-1

Phase I Treatments

Use of vehicles and mechanical equipment during Phase I vegetation treatments and biomass disposal would generate greenhouse gas (GHG) emissions. Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.8-10 and 3.8-11). Consistent with the PEIR, although GHG emissions would occur from equipment and vehicles used to implement treatments, the goals of the proposed vegetation treatments are to increase the health and vigor of retained vegetation and reduce wildfire risk, which would reduce GHG emissions resulting from wildfire and sequester carbon as vegetation matures over the long-term. This impact is within the scope of the PEIR because the proposed treatment activities, associated equipment, duration of use, and resultant GHG emissions, as well as the project purpose, are consistent with those analyzed in the PEIR. No SPRs are needed to maintain this impact at less than significant, consistent with the significance determination in the PEIR. This impact of Phase I of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments activities and herbicide application, as well as masticating and chipping the resultant biomass. Vehicle and equipment use during Phase II would result in GHG emissions. The potential for GHG emissions and associated conflicts with applicable plans, polices, and regulations aimed at reducing GHG emissions is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the proposed treatment activities, associated equipment, duration of use, and resultant GHG emissions, as well as the project purpose, are consistent with those analyzed in the PEIR. No SPRs are needed to maintain this impact at less than significant, consistent with the significance determination in the PEIR. This impact of Phase II of the project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential for GHG emissions and associated conflicts with applicable plans, polices, and regulations aimed at reducing GHG emissions. This impact is within the scope of the PEIR because the proposed treatment activities, associated equipment, duration of use, and resultant GHG emissions, as well as the project purpose, are consistent with those analyzed in the PEIR. No SPRs are needed to maintain this impact at less than significant, consistent with the significance determination in the PEIR. This impact of maintenance treatments is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT GHG-2

Phase I Treatments

Use of vehicles and mechanical equipment during Phase I vegetation treatments and biomass disposal would generate GHG emissions. The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.8-11 through 3.8-17). Consistent with the PEIR, treatment activities implemented under the proposed project would result in GHG emissions directly generated by off-road equipment, on-road vehicles, worker commute trips, and hauling of equipment and materials associated with mechanical treatment activities. However, unlike under the CalVTP, no prescribed burning, which results in substantially more GHG emissions than mechanical treatments, would occur under the proposed project. Nonetheless, this impact would be potentially significant during Phase I of the proposed project. Mitigation Measure GHG-2 would not be applicable to the proposed project because it requires GHG emissions reduction techniques to be implemented during prescribed burning, which is not a proposed treatment activity. Other measures could include the purchase and retirement of carbon credits to offset the one-time GHG emissions directly associated with the proposed project; however, this approach would consume financial resources needed to achieve wildfire risk reduction objectives. No other feasible and effective mitigation exists that would reduce this impact to a less-than-significant level without compromising the effectiveness of the proposed project. This impact is within the scope of the PEIR because the Phase I proposed activities, as well as the associated equipment and duration of use are consistent with those analyzed in the PEIR. In addition, the goals of the proposed vegetation treatments are to increase the health and vigor of retained vegetation and reduce wildfire risk, which would reduce GHG emissions resulting from wildfire and sequester carbon as vegetation matures. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatment activities and herbicide application, as well as masticating and chipping the resultant biomass. Vehicle and equipment use during Phase II would result in GHG emissions. The potential for GHG emissions during Phase II of the proposed project is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the Phase II proposed activities, as well as the associated equipment and duration of use are consistent with those analyzed in the PEIR. This

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

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential for GHG emissions. This impact is within the scope of the PEIR because proposed maintenance activities, as well as the associated equipment and duration of use are consistent with those analyzed in the PEIR. This impact during maintenance treatments is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW IMPACTS RELATED TO GHG EMISSIONS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.8.1, "Environmental Setting," and Section 3.8.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to GHG emissions would occur that is not covered in the PEIR.

4.8 ENERGY RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	LTS	Impact ENG-1, pp. 3.9-7 – 3.9-8	Yes	NA	NA	LTS	No	Yes

[1] LTS = less than significant.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.8.1 Discussion

IMPACT ENG-1

Phase I Treatments

The use of vehicles and mechanical equipment during Phase I treatments, as well as biomass disposal by chipping would result in the consumption of energy through the use of fossil fuels. The use of fossil fuels for equipment and vehicles was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.9-7 and 3.9-8). Consistent with the PEIR, and in consideration of the project's purpose to reduce wildfire occurrence and severity, implementation of treatment activities under Phase I of the proposed project are reasonably expected to reduce the intensity of response to wildfire, specifically the resources needed for fire suppression (e.g., equipment and vehicles). With less intense wildfire suppression response and its relatively inefficient consumption of energy, fuel and energy consumption for wildfire suppression response would decrease, as well. The consumption of energy during implementation of Phase I of the proposed treatment project from the use of equipment and vehicles is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the PEIR. Therefore, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass. These activities would result in the consumption of energy through the use of fossil fuels. The potential for equipment and vehicle use to result in energy consumption is the

same as described under "Phase I Treatments," above. The consumption of energy during implementation of Phase II of the proposed treatment project from the use of equipment and vehicles is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use, are consistent with those analyzed in the PEIR. Therefore, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in energy consumption. This impact is within the scope of the PEIR because the types of activities, as well as the associated equipment and duration of proposed use would be consistent with those analyzed in the PEIR. Therefore, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW ENERGY RESOURCE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.9.1, "Environmental Setting," and Section 3.9.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to energy use would occur that is not covered in the PEIR.

4.9 HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	LTS	Impact HAZ-1, pp. 3.10-14 – 3.10-15	Yes	HAZ-1	NA	LTS	No	Yes
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	LTS	Impact HAZ-2, pp. 3.10-15 – 3.10-18	Yes	HAZ-5 HAZ-6 HAZ-7 HAZ-8	NA	LTS	No	Yes
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	PS	Impact HAZ-3, pp. 3.10-18 – 3.10-19	Yes	NA	HAZ-3	LTSM	No	Yes

[1] LTS = less than significant; PS = potentially significant.

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

New Hazardous Materials, Public Health and Safety Impacts: Would the treatment result in other impacts related to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.9.1 Discussion

IMPACT HAZ-1

Phase I Treatments

Vegetation treatment activities during Phase I of the proposed project include mechanical treatment activities, which would require the use of fuels used for mechanized equipment such as feller bunchers, skid steers, and chippers. Fuels are considered common hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.10-14 and 3.10-15). This impact is within the scope of the PEIR because the types and locations of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. SPR

HAZ-1 would be applicable to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Vegetation treatment activities during Phase II of the proposed project include manual and mechanical treatment activities which would require the use of fuels used for mechanized equipment such as feller bunchers, skid steers, chippers, and chainsaws. The potential for Phase II treatments to result in a significant health hazard from the use of hazardous materials is the same as described above under "Phase I Treatments" and SPR HAZ-1 would also apply. This impact is within the scope of the PEIR because the types and locations of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments" above. Therefore, this impact would be the same as discussed above for Phase II and SPR HAZ-1 would also apply. This impact is within the scope of the PEIR because the types and locations of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT HAZ-2

Phase I Treatments

Phase I of the proposed project does not involve the use of herbicides; therefore, this impact does not apply to Phase I treatments.

Phase II Treatments

Herbicides would be applied by handheld devices under Phase II of the proposed project and have the potential to result in health hazards. The potential for the use of herbicides to cause significant health hazards was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.10-15 to 3.10-18). Consistent with the PEIR, SPR's HAZ-5 through HAZ-8 would be implemented, which require the preparation of a spill prevention and response plan, compliance with applicable regulations by the County's Agricultural Commission, triple rinsing of herbicide containers before disposal, and measures to minimize herbicide drift to non-target areas. This impact is within the scope of the PEIR because the type of herbicides that would be used and methods of application are consistent with those analyzed in the PEIR. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the methods of herbicide application and types of herbicides as would occur during Phase II. Therefore, this impact would be the same as discussed above for Phase II and SPR's HAZ-5 through HAZ-8 would also apply. This impact is within the scope of the PEIR because the type of herbicides that would be used and methods of application are consistent with those analyzed in the PEIR. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT HAZ-3

Phase I, Phase II, and Maintenance Treatments

Phase I, Phase II, and maintenance treatments would occur within the same treatment area and involve ground disturbing treatment activities; therefore, the potential to expose the public or environment to significant hazards from disturbance to known hazardous material sites is the same and they are discussed together herein.

Phase I, Phase II, and maintenance treatments would include ground disturbing vegetation treatments, which, if occurring in a site with contamination, could expose the public or the environment to hazardous materials. The potential for treatment activities to encounter known contamination that could expose the public or the environment to hazardous materials was examined in the PEIR (CalVTP Final PEIR Volume II 3.10-18 to 3.10-19). This impact was identified as potentially significant in the PEIR because of the large geographic extent of the treatable landscape, hazardous materials sites could be present within treatment sites, and soil disturbance in those areas could expose people or the environment to hazards.

As directed by Mitigation Measure HAZ-3, a database search and review of the Cortese List via the GeoTracker database was conducted for hazardous materials sites. No sites with record of contamination were found in the proposed treatment area or within 0.50-mile of the treatment area (SWRCB 2021). Therefore, the risk of exposing the public or environment to significant hazards from the disturbance of a known hazardous material site is extremely low. After implementation of Mitigation Measure HAZ-3, which did not identify any sites, this impact would be less than significant, which is less severe than the significant and unavoidable impact identified in the PEIR. This impact of Phase I, Phase II, and maintenance treatments of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.7.1, "Environmental Setting," and Section 3.7.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to hazardous materials or public health and safety would occur that is not covered in the PEIR.

4.10 HYDROLOGY AND WATER QUALITY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	LTS	Impact HYD-1, pp. 3.11-25 – 3.11-27	No	--	--	--	--	--
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	LTS	Impact HYD-2, pp. 3.11-27 – 3.11-29	Yes	HYD-1 HYD-2 HYD-4 HYD-6 GEO-1, GEO-2 GEO-3 GEO-4 GEO-5 GEO-7 GEO-8 HAZ-1	NA	LTS	No	Yes
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	LTS	Impact HYD-3, p. 3.11-29	No	--	--	--	--	--
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	LTS	Impact HYD-4, pp. 3.11-30 – 3.11-31	Yes	HYD-1 HYD-5 HAZ-5 HAZ-6 HAZ-7 HAZ-8 HAZ-9	NA	LTS	No	Yes

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area	LTS	Impact HYD-5, p. 3.11-31	Yes	HYD-1 HYD-2 HYD-4 HYD-6 GEO-1 GEO-2 GEO-5	NA	LTS	No	Yes

[1] LTS = less than significant.

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

New Hydrology and Water Quality Impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.10.1 Discussion

IMPACT HYD-1

This impact does not apply to the proposed project because no prescribed burning would occur.

IMPACT HYD-2

Phase I Treatments

Phase I vegetation treatment activities include mechanical treatments as well as biomass disposal through chipping and decking boles. These treatment activities would disturb soils and require the use of fuels, which have the potential to enter waterways and degrade water quality. The potential for mechanical treatments and biomass disposal to violate water quality regulations or degrade water quality was evaluated in the PEIR (CalVTP Final PEIR Volume II pp. 3.11-27 to 3.11-29). This impact is within the scope of the PEIR because the types and locations of treatment activities and use of heavy equipment to remove vegetation are consistent with those analyzed in the PEIR. SPRs applicable to the Phase I treatments are HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-4, GEO-7, GEO-8, and HAZ-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments, as well as disposing of biomass through mastication and chipping. These treatment activities have the same potential to violate water quality regulations and degrade water quality as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the types and locations of treatment activities and use of heavy equipment to remove vegetation are consistent with those analyzed in the PEIR. SPRs applicable to the Phase II treatments are HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-4, GEO-7, GEO-8, and HAZ-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to violate water quality regulations and degrade water quality. This impact is within the scope of the PEIR because the types and locations of treatment activities and use of heavy equipment to remove vegetation are consistent with those analyzed in the PEIR. SPRs applicable to the maintenance treatments are HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-4, GEO-7, GEO-8, and HAZ-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT HYD-3

This impact does not apply to the proposed project because no prescribed herbivory would occur.

IMPACT HYD-4

Phase I Treatments

This impact does not apply to the Phase I treatments because no herbicide use or application would occur.

Phase II Treatments

Phase II treatment activities would include ground application of herbicides, which can affect water quality through runoff, leaching, drifting, and misapplication or spills. The potential for herbicide treatment activities to 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 was evaluated in the PEIR (CalVTP Final PEIR Volume II pp. 3.11-29 and 3.11-30). The potential impacts are within the scope of the PEIR because the types of herbicides that would be used, the methods of herbicide application, and the transportation, storage, and disposal of herbicides are consistent with those analyzed in the PEIR. SPRs applicable to Phase II herbicide use are HYD-1, HYD-5, HAZ-5, HAZ-6, HAZ-7, HAZ-8, and HAZ-9. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments under the proposed project would include ground application of herbicides, which can affect water quality through runoff, leaching, drifting, and misapplication or spills. The potential for herbicide treatment activities to 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 is the same as described under "Phase II Treatments," above. The potential impacts are within the scope of the PEIR because the types of herbicides that would be used, the methods of herbicide application, and the transportation, storage, and disposal of herbicides are consistent with those analyzed in the PEIR. SPRs applicable to herbicide use during maintenance treatments are HYD-1, HYD-5, HAZ-5, HAZ-6, HAZ-7, HAZ-8, and HAZ-9. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT HYD-5

Phase I Treatments

Phase I treatments include the use of mechanical equipment and off-road vehicles, which could cause ground disturbance and erosion, potentially directly or indirectly modifying existing drainage patterns. The potential for treatment activities to substantially alter the existing drainage pattern of a treatment site was examined in the PEIR (CalVTP Final PEIR Volume II 3.11-30 and 3.11-31). This impact is within the scope of the PEIR because the types and locations of treatments and treatment intensity are consistent with those analyzed in the PEIR. SPRs applicable to this impact include SPR HYD-1, HYD-2, HYD-4, HYD-6. GEO-1, GEO-2, and GEO-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II treatments include the use of mechanical equipment and off-road vehicles, which could cause ground disturbance and erosion, potentially directly or indirectly modifying existing drainage patterns. The potential for treatment activities to substantially alter the existing drainage pattern of a treatment site is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the types and locations of treatments and treatment intensity are consistent with those analyzed in the PEIR. SPRs applicable to this impact include SPR HYD-1, HYD-2, HYD-4, HYD-6. GEO-1, GEO-2, and GEO-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities that would occur under Phase II and would therefore have the same potential to substantially alter the existing drainage pattern of a treatment site. This impact is within the scope of the PEIR because the types and locations of treatments and treatment intensity are consistent with those analyzed in the PEIR. SPRs applicable to this impact include SPR HYD-1, HYD-2, HYD-4, HYD-6. GEO-1, GEO-2, and GEO-5. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW HYDROLOGY AND WATER QUALITY IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities addressed in the PEIR. The RCD has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental settings discussed in the PEIR (CalVTP Final PEIR, Volume II, Section 3.11.1 and 3.11.2). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would lead to new significant impacts not analyzed in the PEIR. Therefore, no new impact related to hydrology and water quality would occur that is not covered in the PEIR.

4.11 LAND USE AND PLANNING, POPULATION AND HOUSING

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	LTS	Impact LU-1, pp. 3.12-13 – 3.12-14	Yes	AD-3 AD-9	NA	LTS	No	Yes
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15	Yes	N/A	NA	LTS	No	Yes

[1] LTS = less than significant.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Land Use and Planning, Population and Housing Impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.11.1 Discussion

IMPACT LU-1

Phase I Treatments

Phase I of the proposed project would implement ecological restoration treatments using mechanical treatment activities on 60 acres of private property in Davenport, Santa Cruz County. The RCD would comply with all applicable city and county general plans, policies, and ordinances. The potential for treatment activities to cause a significant environmental impact due to the conflict with a land use plan, policy, or regulation was evaluated in the PEIR (CalVTP Final PEIR Volume II pp. 3.12-13 and 3.12-14). The treatment types and activities are within the scope of those evaluated in the PEIR because the treatment activities and associated impacts are consistent with those analyzed in the PEIR. SPRs AD-3 and AD-9 are applicable to this impact and would avoid and minimize the risk of significant environmental impact due to conflicts with a land use plan, policy, or regulation. The RCD will comply with the Coastal Act through its existing PWP (RCD 2021); the treatment design and this PSA are consistent with the requirements of the PWP. Therefore, the impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II of the proposed project would implement ecological restoration treatments and a shaded fuel break using manual and mechanical treatment activites and herbicide applicable on the same 60 acres of private property in Davenport, Santa Cruz County, and has the same potential to conflict with a land use plan, policy, or regulation as described above for the Phase I treatments. The treatment types and activities are within the scope of those evaluated in the PEIR because the treatment activities and associated impacts are consistent with those analyzed in the PEIR. SPRs AD-3 and AD-9 are applicable to this impact and would avoid and minimize the risk of significant environmental impact due to conflicts with a land use plan, policy, or regulation, and Coastal Act compliance will be achieved through the RCD's existing PWP. Therefore, the impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in conflicts with a land use plan, policy, or regulation. This impact is within the scope of the PEIR because the types of activities and associated impacts are consistent with those analyzed in the PEIR. SPRs AD-3 and AD-9 are applicable to this impact and would avoid and minimize the risk of significant environmental impact due to conflicts with a land use plan, policy, or regulation, and Coastal Act compliance will be achieved through the RCD's existing PWP. This impact during maintenance treatments is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT LU-2

Phase I Treatments

Phase I treatments would involve mechancial treatment activities, which would require approximately 10 crew members to implement. The potential for treatments to result in substantial population growth as a result of increases in demand for employees was analyzed in the PEIR (CalVTP Final PEIR Volume II pp. 3.12-14 and 3.12-15). Impacts associated with short-term increases in the demand for workers during implementation of Phase I of the proposed project are within the scope of the PEIR because the number of workers required for implementation of treatments is consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., two to 10 workers for mechanical treatments). Employing local contractors would be encouraged and accommodating up to 10 new contractors over the 40-day span of proposed treatments would not result in substantial unplanned population growth or cause a need for new housing or other infrastructure. For the reasons described above, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II treatments would involve manual and mechancial treatment activities and herbicide application, which would require approximately 10 crew members to implement; therefore, Phase II would have the same potential to induce substantial unplanned population growth as described above for the Phase I treatments. Impacts associated with short-term increases in the demand for workers during implementation of Phase II of the proposed project are within the scope of the PEIR because the number of workers required for implementation of treatments is consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., two to 10 workers for mechanical treatments and up to 10 workers for manual treatments). Therefore, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to induce substantial unplanned population growth as described above. Impacts associated with short-term increases in the demand for workers during maintenance treatments are within the

scope of the PEIR because the number of workers required for implementation of treatments is consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., two to 10 workers for mechanical treatments and up to 10 workers for manual treatments). Therefore, this impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW LAND USE AND PLANNING, POPULATION AND HOUSING IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities addressed in the PEIR. The RCD has considered all site-specific characteristics of the proposed treatment project and determined they are consistent with the regulatory and environmental settings discussed in the PEIR (CalVTP Final PEIR, Volume II, Section 3.12.1 and 3.12.2). No changed circumstances would lead to new significant impacts not analyzed in the PEIR. The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. Therefore, no new impact related to land use and planning or population and housing would occur that is not covered in the PEIR.

4.12 NOISE

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[2]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[3]	List MMs Applicable to the Treatment Project[3]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	LTS	Impact NOI-1, pp. 3.13-9 – 3.13-12; Appendix NOI-1	Yes	AD-3 NOI-1 NOI-2 NOI-3 NOI-4 NOI-5 NOI-6	NA	LTS	No	Yes
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's[1] During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	Yes	NOI-1	NA	LTS	No	Yes

[1] SENL = single event noise level.
[2] LTS = less than significant.
[3] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.12.1 Discussion

IMPACT NOI-1

Phase I Treatments

Mechanical treatments and biomass disposal during Phase I of the proposed project would require the use of noise-generating equipment. The potential for a substantial short-term increase in ambient noise levels from the use of heavy equipment was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.19-9 to 3.13-12). The Santa Cruz County Code includes a section on "Offensive Noise." An "offensive noise" is any noise which is loud, boisterous, irritating, penetrating, or unusual, or that is unreasonably distracting in any other manner such that it is likely to disturb people of ordinary sensitivities in the vicinity of such noise, and includes, but is not limited to, noise made by an individual alone or by a group of people engaged in any business, activity, meeting, gathering, game, dance, or amusement, or by any appliance, contrivance, device, tool, structure, construction, vehicle, ride, machine, implement, or instrument. Noise is considered offensive during daytime hours (i.e., if it occurs between 8:00 a.m. and 10:00 p.m.)

if it is clearly discernible at a distance of 150 feet from the property line of the property from which it is broadcast. Noise limits under the code are more stringent during the nighttime and early morning hours, between the hours of 10:00 p.m. and 8:00 a.m. (Sana Cruz County Code Section 8.30.010). These daytime noise limits would apply to Phase I vegetation treatment activities. All treatments would be limited to daytime hours.

Although there are no residents or other noise sensitive land uses within 150 feet of the treatment area, there are residents located in the vicinity of the proposed treatments. Several SPRs would be implemented, including SPR AD-3 and NOI-1 through NOI-5. For any properties where residences are within 1,500 feet of a treatment area, SPR NOI-6 would also apply. This impact is within the scope of the PEIR, because the number and types of equipment proposed, and the duration of equipment use are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass, which could result in a short-term increase in ambient noise levels from the use of heavy equipment and vehicles. The potential for equipment and vehicles to result in a short-term increase in ambient noise levels is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the number and types of equipment proposed, and the duration of equipment use are consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AD-3, NOI-1 through NOI-5, and NOI-6 where residences are within 1,500 feet of a treatment area. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in a short-term increase in ambient noise levels. This impact is within the scope of the PEIR because the number and types of equipment proposed, and the duration of equipment use are consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AD-3, NOI-1 through NOI-5, and NOI-6 where residences are within 1,500 feet of a treatment area. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT NOI-2

Phase I Treatments

Phase I treatments would involve large trucks hauling heavy equipment to the treatment area. These haul truck trips would pass by residential receptors, and the event of each truck passing by could increase single-event noise levels (SENLs). The potential for a substantial short-term increase in SENLs was examined in the PEIR (CalVTP Final PEIR Volume II p. 3.13-12). This impact is within the scope of the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. The haul trips associated with the proposed treatments would occur during daytime hours, which avoids the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. The SPR applicable to this impact is SPR NOI-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities would also involve large trucks hauling heavy equipment to the treatment areas, which could increase SENLs. The potential for large trucks to result in increased single-event noise levels is the same as described under "Phase I Treatments," above. This impact is within the scope of the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. The haul trips associated with the proposed treatments would occur during daytime hours, which avoids the potential to cause sleep

disturbance to residents during the more noise-sensitive evening and nighttime hours. The SPR applicable to this impact is SPR NOI-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in increased SENLs. This impact is within the scope of the PEIR because the number and types of equipment proposed are consistent with those analyzed in the PEIR. The haul trips associated with the proposed treatments would occur during daytime hours, which avoids the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. The SPR applicable to this impact is SPR NOI-1. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW NOISE IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.13.1, "Environmental Setting," and Section 3.13.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to noise would occur that is not covered in the PEIR.

4.13 RECREATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	LTS	Impact REC-1 pp. 3.14-6 – 3.14-7	Yes	AES-2 NOI-3	NA	LTS	No	Yes

[1] LTS = less than significant.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.13.1 Discussion

IMPACT REC-1

Phase I Treatments

The proposed project would occur entirely within private property and not within a public recreation area; however, the treatment area may be visible from public hiking trails that are part of Rancho del Oso State Park and Big Basin State Park, providing intermittent ridgeline views of the areas proposed for treatment. The proposed Phase I treatments would be implemented using only mechanical treatments activities. Phase I biomass disposal would consist of chipping materials and decking boles in strategic locations to minimize visibility. These vegetation treatment activities have the potential to disrupt recreational activities by degrading the experience of recreationists through the creation of noise or degradation of scenic views. The potential for these treatment activities to disrupt recreational activities within designated recreation areas was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.2-16 through 3.2-19).

The potential for the proposed project to disrupt recreation is within the scope of the PEIR because the treatment activities and intensity are consistent with those analyzed in the PEIR. SPR AES-2 and NOI-3 would be applicable to the proposed project. In addition, the current condition of the treatment is dead and dying trees and vegetation; the project allows for regeneration along the ridgeline, which would be expected to improve views of the treatment area over the long-term. Furthermore, coastal public access and recreational opportunities would not be affected during project operations. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II vegetation treatment activities include manual and mechanical treatments and herbicide application, as well as masticating and chipping the resultant biomass, which could disrupt recreational activities by degrading the experience of recreationists through the creation of noise, dust, or degradation of scenic views. The potential short-term impact to recreational activities during Phase II is the same as described under "Phase I Treatments," above and coastal public access and recreational opportunities would not be affected during project operations. This impact is within the scope of the PEIR because the Phase II treatment activities and the types of equipment proposed for use during Phase II of the proposed project are consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AES-2 and NOI-3. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to disrupt recreational activities by degrading the experience of recreationists through the creation of noise, dust, or degradation of scenic views. Additionally, coastal public access and recreational opportunities would not be affected during project operations. This impact is within the scope of the PEIR because the maintenance treatment activities and the types of equipment proposed for use during maintenance are consistent with those analyzed in the PEIR. The SPRs applicable to this impact are AES-2 and NOI-3. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW RECREATION IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.14.1, "Environmental Setting," and Section 3.14.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to recreation would occur that is not covered in the PEIR.

4.14 TRANSPORTATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[2]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[3]	List MMs Applicable to the Treatment Project[3]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact TRAN-1: Result in Temporary Traffic Operations Impacts by Conflicting with a Program, Plan, Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures	LTS	Section 3.15.2; Impact TRAN-1 pp. 3.15-9 – 3.15-10	Yes	AD-3	NA	LTS	No	Yes
Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses	LTS	Impact TRAN-2 pp. 3.15-10 – 3.15-11	Yes	AD-3	NA	LTS	No	Yes
Impact TRAN-3: Result in a Net Increase in VMT[1] for the Proposed CalVTP	PSU	Impact TRAN-3 pp. 3.15-11 – 3.15-13	Yes	NA	None	LTS	No	Yes

[1] VMT = vehicle miles traveled.
[2] LTS = less than significant; PSU = potentially significant and unavoidable.
[3] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.14.1 Discussion

IMPACT TRAN-1

Phase I Treatments

Phase I of the proposed project entails implementation of ecological restoration treatments using mechanical treatment activities and would temporarily increase vehicular traffic along roadways in the vicinity of the project, including Last Chance Road, Swanton Road, and SR 1. The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.15-9 and 3.15-10). The proposed Phase I treatments would be short-term, occurring over approximately 40 days, and few new vehicle trips would be created due to the small treatment crew that would be used (i.e., up to 10 crew members). Furthermore, all biomass would remain onsite and not result in additional vehicle trips. Traffic operations related impacts would be temporary and minor and would not result in a conflict with a program, plan, ordinance, or policy addressing roadway facilities or result in any road closures.

Temporary increases in traffic related to treatments are within the scope of the PEIR because the treatment duration and limited number of vehicles required for equipment transport, vehicles for crew transport are consistent with those analyzed in the PEIR. Only SPR AD-3 would be applicable to the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II of the proposed project entails implementation of ecological restoration and shaded fuel break treatments using manual and mechanical treatment activities and herbicide application. The potential for Phase II treatments to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures is the same as described above under "Phase I Treatments" and SPR AD-3 would also apply. This impact is within the scope of the PEIR because the treatment duration and limited number of vehicles required for equipment transport, vehicles for crew transport are consistent with those analyzed in the PEIR. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments" above. Therefore, this impact would be the same as discussed above for Phase II and SPR AD-3 would also apply. This impact is within the scope of the PEIR because the treatment duration and limited number of vehicles required for equipment transport, vehicles for crew transport are consistent with those analyzed in the PEIR. This impact is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT TRAN-2

Phase I Treatments

Phase I vegetation treatments would not require the construction or alteration of any roadways. However, the proposed treatments would include mechanical treatments and require the transportation of heavy mechanical equipment along small and mountainous roadways, which could create increased transportation hazards due to incompatible uses. The potential for the hauling of machinery to remote treatment areas was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.15-10 and 3.15-11). This impact is within the scope of the activities and impacts addressed in the PEIR because the quantity and types of equipment proposed for use that would require transport to treatment areas are the same as those analyzed in the PEIR. In addition, the transport of equipment would be infrequent, occurring primarily at the start and the end of treatment activities, and would only require a few trips. Only SPR AD-3 is applicable to this impact. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II of the proposed project would include manual and mechanical treatments and herbicide application and would also require the transportation of heavy mechanical equipment along small and mountainous roadways, which could create increased transportation hazards due to incompatible uses. The potential for Phase II treatments to create transportation hazards due to incompatible uses is the same as described above under "Phase I Treatments" and SPR AD-3 would also apply. This impact is within the scope of the activities and impacts addressed in the PEIR because the quantity and types of equipment proposed for use that would require transport to treatment areas are the same as those analyzed in the PEIR. In addition, the transport of equipment would be infrequent, occurring primarily at the start and the end of treatment activities, and would only require a few trips. Impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Activities

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments" above. Therefore, this impact would be the same as discussed above for Phase II and SPR AD-3 would also apply. This impact

is within the scope of the activities and impacts addressed in the PEIR because the quantity and types of equipment proposed for use that would require transport to treatment areas are the same as those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT TRAN-3

Phase I Treatments

Implementation of Phase I vegetation treatments would temporarily increase vehicle miles traveled (VMT) above baseline conditions because the proposed project would require vehicle trips to transport crew members and equipment to the treatment area. This impact was addressed in the PEIR and was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP would result in a net increase in VMT (CalVTP Final PEIR Volume II pp. 3.15-11 to 3.15-13). However, as noted under Impact TRAN-3 in the PEIR, individual vegetation treatment projects under the CalVTP are reasonably expected to generate fewer than 110 trips per day, which would cause a less-than-significant transportation impact for specific later activities, as described in the Technical Advisory on Evaluating Transportation Impacts published by the Governor's Office of Planning and Research (OPR 2018).

Mechanical treatments during Phase I of the proposed project would require up to 10 crew members at any one time, and Phase I is anticipated to occur over approximately 40 days. All biomass would remain onsite. Crew sizes are sufficiently small such that the total increase in VMT would be well below 110 trips per day. In addition, the increase in vehicle trips would be temporary, lasting only the length of project implementation. A temporary increase in VMT is within the scope of the activities and impacts addressed in the PEIR because the number and duration of increased vehicle trips are consistent with that analyzed in the PEIR. This impact would be less than significant, and Mitigation Measure AQ-1 would not be required for this impact of the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Implementation of Phase II of the proposed project would also temporarily increase VMT above baseline conditions because the proposed project would require vehicle trips to transport crew members and equipment to the treatment area. Manual and mechanical treatments and herbicide application during Phase II would also consist of treatment crews of up to 10 people working onsite at any one time, and all biomass would remain onsite. Therefore, the potential for Phase II treatments to increase VMT is the same as described above under "Phase I Treatments." A temporary increase in VMT is within the scope of the activities and impacts addressed in the PEIR because the number and duration of increased vehicle trips are consistent with that analyzed in the PEIR. This impact would be less than significant, and Mitigation Measure AQ-1 would not be required for this impact of the proposed project. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities and crew size as described under "Phase II Treatments" above. Therefore, this impact would be the same as discussed above for Phase II and Mitigation Measure AQ-1 would not apply. A temporary increase in VMT is within the scope of the activities and impacts addressed in the PEIR because the number and duration of increased vehicle trips are consistent with that analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

NEW TRANSPORTATION IMPACTS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.15.1, "Environmental Setting," and Section 3.15.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to transportation would occur that is not covered in the PEIR.

4.15 PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR[1]	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project[2]	List MMs Applicable to the Treatment Project[2]	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Section 3.16.1 pp. 3.16-2 – 3.16-3; Impact UTIL-1 p. 3.16-9	Yes	NA	NA	LTS	No	Yes
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	PSU	Section 3.16.1 pp. 3.16-3 -3.16-5; Impact UTIL-2 pp. 3.16-10 – 3.16-12	No	--	--	--	--	--
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Section 3.16.2 pp. 3.16-6 – 3.16-7; Impact UTIL-2 p. 3.16-12	No	--	--	--	--	--

[1] LTS = less than significant; PSU = potentially significant and unavoidable.

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

New Public Services, Utilities and Service System Impacts: Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.15.1 Discussion

IMPACT UTIL-1

Phase I Treatments

Phase I vegetation treatments would entail the implementation of ecological restoration treatment using mechanical treatment activities. Water would be required during implementation of Phase I of the proposed project as a safety measure for fire suppression (i.e., 5,000 gallon trailer with a pump), and to minimize dust if excessive dust while traveling on unpaved roads or to remove visible dirt or mud that gets tracked out onto public paved roadways, pursuant to SPR AQ-4. The potential increase in water demand as a result of treatment activities was examined in the PEIR (CalVTP Final PEIR Volume II p. 3.16-9).

The most water-intensive activities described in the PEIR would be providing on-site water for prescribed burning and during vegetation removal within nonshaded fuel breaks. Prescribed burning and the creation of nonshaded fuel breaks would not occur under the proposed project. This impact is within the scope of the impacts addressed in the PEIR because the treatment types and activities are consistent with those included in the PEIR and the amount of water required during project implementation is consistent with, although substantially less than, what was analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II would entail implementation of ecological restoration treatments and the creation of a shaded fuel break using manual and mechanical treatment activities and herbicide application. Phase II vegetation treatment activities may also require water to minimize dust and tracked dirt, and the potential to increase water demand is the same as described under "Phase I Treatments," above. This impact is within the scope of the impacts addressed in the PEIR because the treatment types and activities are consistent with those included in the PEIR and the amount of water required during project implementation is consistent with, although substantially less than, what is analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Treatments

Maintenance treatments would involve the same treatment activities as described under "Phase II Treatments," above and would therefore have the same potential to result in dust and subsequently, increased water demand. This impact is within the scope of the impacts addressed in the PEIR because the treatment types and activities are consistent with those included in the PEIR and the amount of water required during project implementation is consistent with, although substantially less than, what is analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT UTIL-2

Vegetation treatments would generate biomass as a result of vegetation removal within the treatment areas. Biomass generated by mechanical and manual treatments would be disposed of primarily through chipping and masticating, and some boles would be decked during Phase I treatments for later processing. This impact was identified as potentially significant and unavoidable in the PEIR because biomass hauled offsite could exceed the capacity of existing infrastructure for handling biomass. For the proposed treatment project, no biomass would be hauled offsite; therefore, there is no potential to exceed the capacity of existing infrastructure, and this impact does not apply to the proposed project.

IMPACT UTIL-3

This impact does not apply to the proposed project because all biomass generated from the proposed treatments would be disposed of onsite.

NEW IMPACTS TO PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.16.1, "Environmental Setting," and Section 3.16.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to public services or utilities and service systems would occur that is not covered in the PEIR.

4.16 WILDFIRE

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

[1] LTS = less than significant.
[2] NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?	☐ Yes	☒ No	If yes, complete row(s) below and discussion

	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
NA	☐	☐	☐

4.16.1 Discussion

IMPACT WIL-1

Phase I Treatments

Mechanical vegetation treatments proposed under Phase I of the project would use heavy, motorized machinery within the treatment area, which could exacerbate wildfire risk if accidental ignition occurred from heat or sparks contacting vegetation. The potential exacerbation of wildfire risk and increase in exposure to wildfire as a result of vegetation treatments was examined in the PEIR (CalVTP Final PEIR Volume II pp. 3.17-14 to 3.17-15). Increased wildfire risk associated with the use of heavy equipment in vegetated areas is within the scope of the PEIR because the types of equipment, proposed treatment activities, and treatment duration are consistent with those analyzed in the PEIR. In addition, no prescribed burning would occur under the proposed project. SPRs that would be applicable are HAZ-2, HAZ-3, and HAZ-4, which would minimize the risk of accidental ignition. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Phase II Treatments

Phase II treatment activities include manual and mechanical vegetation treatments and herbicide application. The potential to exacerbate wildfire risk during implementation of Phase II treatments is the same as described above for Phase I and the same SPRs would apply. Increased wildfire risk associated with the use of heavy equipment in vegetated areas is within the scope of the PEIR, because the types of equipment, treatment activities, and treatment duration are consistent with those analyzed in the PEIR. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Maintenance Activities

Maintenance treatments would involve the same treatment activities as Phase II as thus would have the same potential to exacerbate wildfire risk from the use of mechanical equipment in vegetation areas, and the same SPRs would apply. Increased wildfire risk associated with the use of heavy equipment in vegetated areas is within the scope of the PEIR, because the types of equipment and treatment activities, are consistent with those analyzed in the PEIR. This impact of the proposed maintenance activities is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

IMPACT WIL-2

The proposed project would not implement prescribed burning during any phase of implementation, including maintenance treatments, which could result in post-fire flooding or landslides. It also does not include new housing, nor would it result in population growth, thereby potentially exposing more people to postfire risks of flooding or landslides. Furthermore, because the treatments would reduce wildfire risk, they would also decrease post wildfire landslide and flooding risk in areas that could otherwise burn in a high-severity wildfire without treatment. Therefore, this impact does not apply to the project.

NEW IMPACTS TO WILDFIRE

The proposed treatments are entirely within the CalVTP treatable landscape and are consistent with the treatment types and activities considered in the CalVTP PEIR. The RCD has considered the site-specific characteristics of the proposed treatment project and determined they are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.17.1, "Environmental Setting," and Section 3.17.2, "Regulatory Setting," in Volume II of the Final PEIR). The RCD has also determined that the circumstances under which the proposed treatment project would be undertaken are also consistent with those considered in the PEIR. No changed circumstances would give rise to new significant impacts not addressed in the PEIR. Therefore, no new impact related to wildfire would occur that is not covered in the PEIR.

This page intentionally left blank.

CHAPTER 5 LIST OF PREPARERS

Resource Conservation District of Santa Cruz County (Project Proponent)

Lisa Lurie ..... Executive Director

Matt Abernathy ..... Project Manager/Forest Health and Wildfire Resiliency Program Specialist

Kelli Camara ..... Consultant Technical Program Director

California Coastal Commission (Project Coordination and PWP Consistency Determination)

Lauren Garske-Garcia, PhD ..... Senior Ecologist

Daniel Nathan ..... Coastal Program Analyst

Robert Moore ..... Coastal Planner

CAL FIRE San Mateo-Santa Cruz Unit (CZU) (Project Coordination)

Julie Howard ..... Forest Health Program Manager

Ryan Wimmer ..... Forester

Santa Cruz County Planning Department (Project Coordination)

Matt Johnston ..... Principal Planner

Logan Thompson ..... Resource Planner

Ascent Environmental, Inc. (CEQA and Coastal Act Compliance Documentation)

Curtis E. Alling, AICP. ..... Principal Strategist

Heather Blair ..... Principal/Project Director

Lily Bostrom ..... Project Manager/Senior Environmental Planner

Lara Rachowicz, PhD. ..... Senior Biologist

Tammie Beyerl ..... Senior Ecologist

Ted Thayer ..... Staff Biologist

Alta Cunningham ..... Senior Cultural Resource Specialist/Architectural Historian

Emilie Zelazo, RPA. ..... Cultural Resource Specialist

Richa Nanavati ..... Environmental Planner

Lisa Merry ..... GIS Specialist

Gayiety Lane ..... Publishing Specialist

Michele Mattei ..... Publishing Specialist

Brian Perry ..... Graphic Specialist

This page intentionally left blank.

CHAPTER 6 REFERENCES

Project Summary

Jones and Stokes Associates, Inc. 1994. Final. Monterey pine forest ecological assessment: historical distribution ecology, and current status of Monterey pine. September 12. (JSA 94-083.) Sacramento, CA. Prepared for the Nature Conservancy. Sacramento, CA, and the California Department of Fish and Game, Monterey, CA.

McDonald, Philip M.; Laacke, Robert J. 1990. Pinus radiata D. Don Monterey pine. In: Burns, Russell M. Honkala, Barbara H., technical coordinators. Silvics of North America. Volume 1. Conifers. Agric. Handb. 654. Washington, DC: U.S. Department of Agriculture, Forest Service: 433-441.

Offord, Harold R. 1964. Diseases of Monterey pine in native stands of California and in plantations of western North America. USDA Forest Service, Research Paper PSW-14. Pacific Southwest Forest and Range Experiment Station, Berkeley, CA. 37 p.

Scott, C. W. 1960. Pinus radiata. Food and Agriculture Organization of the United Nations, Forestry and Forest Products Study 14. Rome, Italy. 328 p.

Stephens, Scott L., D. Pirrto, and D. Carmagno. 2004. Fire Regimes and Resultant Forest Structure in Native Ano Nuevo Monterey Pine (*Pinus radiata*) Forest, California.

Project Description

California Invasive Plant Council. 2020. California Invasive Plant Council – Protecting California's Environment and Economy from Invasive Plants. Available: https://www.cal-ipc.org/. Accessed 3 March, 2021.

EPA. *See* U.S. Environmental Protection Agency.

J.P. Skovsgaad. 2009. Analysing effects of thinning on stand volume growth in relation to site conditions: A case study for even-aged Sitka spruce (Picea sitchensis (Bong.) Carr.), Forestry: An International Journal of Forest Research, Volume 82, Issue 1, January 2009, Pages 87-104, https://doi.org/10.1093/forestry/cpn047.

McDonald, Philip M.; Laacke, Robert J. 1990. Pinus radiata D. Don Monterey pine. In: Burns, Russell M. Honkala, Barbara H., technical coordinators. Silvics of North America. Volume 1. Conifers. Agric. Handb. 654. Washington, DC: U.S. Department of Agriculture, Forest Service: 433-441.

U.S. Environmental Protection Agency. 2021. How to Comply with Requirements to Protect California Red-legged Frog from Pesticides. Available: https://www.epa.gov/endangered-species/how-comply-requirements-protect-california-red-legged-frog-pesticides#bulletfive. Accessed: 11/29/2021.

Aesthetics

California Department of Transportation. 2021. California State Scenic Highway System Map. Available: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed: 11/5/2021.

Caltrans. *See California Department of Transportation.*

Air Quality

California Department of Conservation. 2010. Ultramafic Rock in Outcrop layer from Geologic Map of California. Sacramento, CA. Available: https://www.arcgis.com/apps/webappviewer/index.html?id=da4b648958844134adc25ff002dbea1c. Accessed: 11/22/2021.

DOC. *See* California Department of Conservation.

U.S. Geological Survey. 2011. Naturally Occurring Asbestos layer from Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California: U.S. Geological Survey Open-File Report 2011–1188, 22 p., 1 pl. Available: https://www.arcgis.com/apps/webappviewer/index.html?id=da4b648958844134adc25ff002dbea1c. Accessed: 11/22/2021.

USGS. *See* U.S. Geological Survey.

Biological Resources

Bay Area Conservation Network. 2019. Habitat Connectivity Map. Available: https://www.bayarealands.org/maps-data/ Accessed November 22, 2021.

Bulger, J. B., N. J. Scott Jr., and R. B. Seymour. 2003. Terrestrial Activity and Conservation of Adult California Red-legged Frogs *Rana aurora draytonii* in Coastal Forests and Grasslands. *Biological Conservation* 110:85-95.

California Department of Fish and Wildlife. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.* March 20, 2018. Revised February 3, 2021.

_____.2021. Webpage on Natural Communities. List of Sensitive Natural Communities. Available: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities. Accessed December, 2021

Calflora. 2021. *Information on California plants for education, research, and conservation, with data contributed by public and private individuals and institutions, including the Consortium of California Herbaria. The Calflora Database*. Available: http://www.calflora.org/. Accessed: November 16, 2021.

California Native Plant Society. 2021a. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available: http://www.rareplants.cnps.org. Accessed October 7, 2021.

_____. 2021b. A Manual of California Vegetation, Online Edition. http://www.cnps.org/cnps/vegetation. California Native Plant Society, Sacramento, CA. Accessed December 22, 2021.

California Natural Diversity Database. 2021. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed October 7, 2021.

CDFW. *See* California Department of Fish and Wildlife.

CNDDB. *See* California Natural Diversity Database.

CNPS. *See* California Native Plant Society.

CWHR. *See.* California Wildlife Habitat Relationship System.

California Wildlife Habitat Relationship System. 1990. *Life history account for American Badger* (*Taxidea taxus*). California Department of Fish and Wildlife, California Interagency Wildlife Task Group. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2597&inline=1. Accessed November 2021.

Fellers, G. M., and P. M. Kleeman. 2007. California Red-Legged Frog (*Rana draytonii*) Movement and Habitat Use: Implications for Conservation. *Journal of Herpetology* 41:276-286.

RCD. *See* Resource Conservation District of Santa Cruz County.

Resource Conservation District of Santa Cruz County. 2021. Santa Cruz County Forest Health and Fire Resilience Public Works Plan. Final Draft. June 16, 2021.

Santa Cruz County. 1994. Santa Cruz County Local Coastal Program. Chapter 16.32 *Sensitive Habitat Protection*.

Skovsgaad, J.P. 2009. Analysing effects of thinning on stand volume growth in relation to site conditions: A case study for even-aged Sitka spruce (Picea sitchensis (Bong.) Carr.), Forestry: An International Journal of Forest Research, Volume 82, Issue 1, January 2009, Pages 87-104, https://doi.org/10.1093/forestry/cpn047.

University of California. 2022. *Forest Research and Outreach, Douglas-fir (Pseudotsuga menziesii)*. Available: https://ucanr.edu/sites/forestry/California_forests/http___ucanrorg_sites_forestry_California_forests. Accessed February 23, 2022.

U. S. Forest Service. 2022. *Fire Effects Information System, Acer macrophyllum*. Available: https://www.fs.fed.us/database/feis/plants/tree/acemac/all.html. Accessed February 23, 2022.

USFS. *See* U. S. Forest Service.

Vreeland, J. K., W.D. Tietje. 1998. Initial Response to Prescribed Burning in Oak Woodland. Transactions of the Western Section of The Wildlife Society. Vol 34:21-31.

Yovovich, Veronica, PhD. Wildlife Conflict Specialist. U.C. Berkeley. December 2, 2021. Email to Lara Rachowicz of Ascent Environmental regarding puma breeding in Santa Cruz County.

Geology, Soils, Paleontology, and Mineral Resources

California Department of Conservation. 2015. Landslide Inventory (Beta) mapping tool. Available: https://maps.conservation.ca.gov/cgs/lsi/app/. Accessed: 11/15/2021.

Hazardous Materials, Public Health and Safety

State Water Resources Control Board. 2021. GeoTracker mapping tool. Available: https://geotracker.waterboards.ca.gov/map/. Accessed: 12/6/2021.

Land Use and Planning

RCD. *See* Resource Conservation District of Santa Cruz County.

Resource Conservation District of Santa Cruz County. 2021. Santa Cruz County Forest Health and Fire Resilience Public Works Plan. Final Draft. June 16, 2021.

Transportation

Governor's Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018.

OPR. *See* Governor's Office of Planning and Research.

Appendix A

Mitigation Monitoring and
Reporting Program for the
Last Chance Road Forest Health Project

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The Resource Conservation District of Santa Cruz County (RCD) prepared a Project-Specific Analysis (PSA) under the California Vegetation Treatment Program (CalVTP) for the Last Chance Road Forest Health Project (project or proposed project). The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project because the PSA identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. Standard project requirements (SPRs), which are part of the project description, have been defined to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. While only mitigation measures are required to be covered in an MMRP, both SPRs and mitigation are included in this MMRP to assist in implementation of all required environmental protection features for project activites.

The RCD's certified Santa Cruz County Forest Health and Fire Resilience Public Works Plan (PWP) is a companion to the CalVTP that provides a streamlined mechanism for Coastal Act compliance through the submittal and approval of Notice of Impending Developments (NOIDs) for individual projects. The PWP requires adherence to Coastal Vegetation Treatment Standards (CVTS) approved as part of the PWP and additional information about project design within the Santa Cruz County Coastal Zone. As the responsible agency under CEQA and administrator of the PWP, the RCD is responsible for the overall administration of this project-specific MMRP and ensuring compliance with the Coastal Act. Where Coastal Act requirements differ from or are more protective than the CalVTP SPRs and mitigation measures in the PSA, they have been integrated into the SPRs and mitigation measures for the project as project-specific implementation directives (e.g., specific no-disturbance buffers for nesting birds, larger no-activity buffer for discovered native American sites and human remains).

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to facilitate the implementation of SPRs and mitigation measures. The attached table presents the text of each SPR and mitigation measure from the CalVTP PEIR that is applicable to the project, the timing of its planned implementation, the implementing entity, and the entity with monitoring responsibility. The numbering of SPRs and mitigation measures follows the numbering used in the PEIR. SPRs and mitigation measures that are referenced more than once in the PSA are not duplicated in the MMRP. Instructions for project-specific implementation of certain SPRs and mitigation measures has been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, the conditions and resources present within each treatment site, and to comply with the requirements of the PWP. In all cases, additional project-specific implementation instruction and clarifying edits to mitigation measures maintain the SPRs and mitigation measures as equivalent or more effective than those presented in the CalVTP PEIR.

ROLES AND RESPONSIBILITIES

As the responsible agency under CEQA and administrator of the PWP, the RCD is responsible for the overall administration of this project-specific MMRP and for ensuring that implementation of the mitigation measures and SPRs occurs in accordance with this MMRP.

The RCD will implement the Phase I treatments beginning in May 2022, and will implement the Phase II and maintenance treatments as funding becomes available. The collaborating landowner may also maintain the treatment area in the future. In all cases, the RCD will adhere to this MMRP to fulfill its requirements for CEQA and Coastal Act

compliance. The collaborating landowner would be required to implement treatments consistent with the PSA, CVTS, and the mitigation measures and SPRs in this MMRP if they are using the PWP for Coastal Act compliance. In this circumstance, the RCD is responsible for ensuring that the treatments conducted by the landowner are implemented consistent with all applicable SPRs and mitigation measures and reporting and coordination is completed pursuant to the RCD's obligations under the PWP.

As specified herein, the RCD and the collaborating landowner are responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure, and for demonstrating that the action has been successfully completed. The RCD will be responsible for mitigation monitoring and reporting as described in Section 15097 of the State CEQA Guidelines.

REPORTING

The RCD shall document and describe the compliance of project treatment work with the required SPRs and mitigation measures either by adapting the project-specific MMRP table below or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7.

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

The categories identified in the attached MMRP table are described below.

- **SPRs and Mitigation Measures** – This column provides the verbatim text of the applicable SPR or adopted mitigation measure.
- **Timing** – This column identifies the time frame in which the SPR or mitigation measure will be implemented.
- **Implementing Entity** – This column identifies the party responsible for implementing the SPR or mitigation measure.
- **Verifying/Monitoring Entity** – This column identifies the party responsible for verifying and monitoring implementation of the SPR or mitigation measure.

Mitigation Monitoring and Reporting Program

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
STANDARD PROJECT REQUIREMENTS (SPRS)				
Administrative Standard Project Requirements				
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD
SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions: i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to all treatment activities. Coastal Act Compliance for this project has been achieved through Coastal Commission approval of the PSA and Coastal VTS.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Aesthetic and Visual Resource Standard Project Requirements				
SPR AES-2: Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD
Air Quality Standard Project Requirements				
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD
SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures: ▶ Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. ▶ If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. ▶ Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements				
SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: N** **Treatment Maintenance: N**	Prior to all treatment activities. A records search of the treatment area and 0.25-mile buffer surrounding treatment area has been conducted; see PSA for a summary of the results. Compliance with this SPR is complete.	RCD	RCD
SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following: ▶ A written description of the treatment location and boundaries. ▶ Brief narrative of the treatment objectives. ▶ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages. ▶ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. ▶ A request for information regarding potential impacts to cultural resources from the proposed treatment.	**Phase I Treatment: Y** **Phase II Treatment: N** **Treatment Maintenance: N**	Prior to all treatment activities. Outreach to the NAHC has occurred, Tribes have been contacted, and SLF query completed; see PSA for a summary of consultation and SLF results. Compliance with this SPR is complete.	RCD	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ A detailed description of the depth of excavation, if ground disturbance is expected. In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: N** **Treatment Maintenance: N**	Prior to treatment activities. Pre-field research has occurred by qualified archaeologists and is documented in the 2022 Archaeological Survey Report. Compliance with this SPR is complete.	RCD	RCD
SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: N** **Treatment Maintenance: N**	Prior to treatment activities. Archaeological surveys were completed for the project January 26 – January 28, 2022 and the results are documented in the 2022 Archaeological Survey Report. Compliance with this SPR is complete.	RCD	RCD
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to all treatment activities.	RCD/landowner	RCD
Biological Resources Standard Project Requirements				
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data,	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to all treatment activities. Initial data review and reconnaissance-level survey have been conducted, see PSA for results.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment: 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment: a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).				

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist. 2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD, CDFW, and USFWS, as appropriate

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Sensitive Natural Communities and Other Sensitive Habitats				
SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will: ▶ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). ▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to all Phase II and maintenance treatment activities.	RCD/landowner	RCD
SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., Ione chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle): ▶ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ▶ include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training;	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; ▶ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; ▶ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and ▶ follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytoptheras* in Native Habitats 2016). This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Special-Status Plants				
SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities." Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status. If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS. For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to all treatment activities	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Environmentally Sensitive Habitat Areas				
SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts: ▶ The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA. ▶ Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD and California Coastal Commission

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
restore densities that are characteristic of healthy stands of the vegetation types present in the ESHA. ▶ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs. ▶ Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
Invasive Plants and Wildlife				
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; ▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; ▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD

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

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
potential to occur in the treatment area may not be required if presence of the species is assumed. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** ▶ To avoid impacts on special-status salamanders (i.e., California giant salamander, Santa Cruz black salamander), focused surveys (i.e., walk and turn surveys) would be conducted within habitat suitable for the species prior to each phase of the project. ▶ For treatment activities that occur during the nesting bird season (February 1–August 31) and to avoid impacts on special-status birds (i.e., osprey, Cooper's hawk, long-eared owl, white-tailed kite), focused surveys (i.e., nest searches) for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season. ▶ For mechanical treatments and manual treatment activities using power equipment that cannot be avoided during the American badger pupping season and to avoid impacts to American badger focused surveys dens will be conducted prior to implementing treatment activities during the pupping season (February 15 – July 1). ▶ For treatment activities that cannot be avoided during the bat maternity season and to avoid impacts on pallid bat focused surveys for maternity roosts will be conducted prior to implementing treatment activities during the bat maternity season (April 1–August 31). ▶ To avoid impacts on San Francisco dusky-footed woodrats, focused surveys for the species would be conducted within habitat suitable for the species prior to implementation of mechanical and manual treatments using power equipment.	**Treatment Maintenance: Y** ▶ Special-status salamanders ▶ Special-status birds ▶ American badger ▶ Pallid bat ▶ San Francisco dusky footed woodrat			
SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies (typically, up to 3 weeks before treatment). If an active nest is observed, implement	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
records (e.g., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food). If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following: ▶ **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.		avoidance strategies prior to and during all treatment activities.		

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
▶ **Modify Treatment.** The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist. ▶ **Defer Treatment.** The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests: ▶ **Monitor Active Raptor Nest During Treatment**. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer,				

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases. ▶ **Retention of Raptor Nest Trees**. Trees with visible nests will be retained, whether or not the nests occupied. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** Due to the occurrence of the project in the Coastal Zone, and consistent with Coastal Commission guidance, the following project-specific measure is required: ▶ If disturbance to nesting birds cannot be avoided by modifying or delaying treatment, a 300-foot buffer around active nests of non-raptors and a 500-foot buffer around all active raptor nests will be established. These buffers may be modified by a qualified biologist based on vegetative cover, nest height, and topography that would attenuate noise and visual disturbance, as well as species sensitivity. Nest buffers may be reduced to a minimum of 100 feet.				
Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements				
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Project-Specific Implementation ▶ To prevent herbicides from being mobilized and soil from being compacted which increases runoff and erosion risk, the project proponent will suspend mechanical and herbicide treatments if: (1) it is raining, (2) soils are saturated, and/or (3) soils are wet enough to mobilize herbicides or be compacted by mechanical activities such that tire tracks are created. The project proponent will be prepared to completely suspend mechanical and herbicide treatment activities prior to the initiation of the rain event. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer very wet or saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of very wet or saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, (5) inadequate traction without blading wet soil or surfacing materials, or (6) tire track imprints in the soil. This SPR applies only to mechanical and herbicide treatment activities, and all treatment types, including treatment maintenance. ▶ ~~The project proponent will limit work to outside of the wet season. The wet season starts with the first frontal rain system depositing a minimum of 0.25 inch of rain after October 15 and ends on April 15. Additionally, mechanized and herbicide treatments will be avoided 24 hours after a rain event defined as any precipitation resulting in 0.2 inch or greater throughout the year. Mechanical and herbicide treatments will not occur when soil is saturated or wet~~. All mechanized equipment including track chippers and herbicide treatments will shut down for 24 hours following any precipitation event of 0.20 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches. Handwork may continue.				
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During mechanical treatment activities that result in exposure of bare soil over 50 percent or more of the treatment area.	RCD/landowner	RCD
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during mechanical treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During mechanical treatment activities.	RCD/landowner	RCD
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity. (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to mechancial treatments used to implement ecological restoration treatments on slopes greater than 50 percent.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.				
Hazardous Materials and Public Health and Safety Standard Project Requirements				
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During manual treatment activities using mechanized hand tools (Phase II and maintenance treatments only).	RCD/landowner	RCD
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During manual treatment activities (Phase II and maintenance treatments only).	RCD/landowner	RCD
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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. The SPRP will include (but not be limited to): ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; ▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; and ▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prepare SPRP prior to Phase II and maintenance treatments involving herbicides.	RCD/landowner	RCD
SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to, during, and following Phase II and maintenance treatments involving herbicides.	RCD/landowner	RCD and Santa Cruz County Agricultural Commissioner
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Following Phase II and maintenance treatments involving herbicides.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.				
SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas: ▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▶ spray nozzles will be kept within 24 inches of vegetation during spraying. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During Phase II and maintenance treatments involving herbicides.	RCD/landowner	RCD
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance	**Phase I Treatment: N** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to Phase II and maintenance treatments involving herbicides occurring within 500 feet of public recreation areas, residential areas, schools, or any other public areas within 500 feet.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Hydrology and Water Quality Standard Project Requirements				
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance. **Project-Specific Implementation** Vegetation treatment activities may result in discharges to waters of the state; therefore; compliance with Water Code sections 13260(a)(1) and 13264 are required. Because the Central Coast RWQCB does not have an applicable Regional Water Board Order for disposal of vegetation treatment wastes for this project, the project proponent may use the State Water Board's Vegetation Treatment General Order. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water Board's Vegetation Treatment General Order, which pertains to projects that prepare a CalVTP PSA or PSA/Addendum. The project's automatic enrollment satisfies the requirements of SPR HYD-1.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Establish WLPZs prior to all treatments; implement WLPZ protections during all treatment activities.	RCD/landowner	RCD

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths

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

Water Class	Class I	Class II	Class III	Class IV
>50 % Slope	150	100	downstream beneficial uses of water. Determined on a site-specific basis.	

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

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
The following WLPZ protections will be applied for all treatments: ▶ Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version). ▶ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry. ▶ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas. ▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. ▶ Burn piles will be located outside of WLPZs. ▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.				

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

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

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Noise Standard Project Requirements				
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all mechanical treatment activities.	RCD/landowner	RCD
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses	**Phase I Treatment: Y** **Phase II Treatment: Y**	During all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
(e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	**Treatment Maintenance: Y**			
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all treatment activities.	RCD/landowner	RCD
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to mechanical treatment activities occurring within 1,500 feet of noise-sensitive receptors.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
MITIGATION MEASURES				
Air Quality				
Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following: ▶ Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment. ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: ▪ meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; ▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ▪ contain no fatty acids or functionalized fatty acid esters; and ▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975	Phase I Treatment: Y Phase II Treatment: Y Treatment Maintenance: Y	Prior to and during all treatment activities (where feasible).	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. ▶ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_X and PM.				
Archaeological, Historical, and Tribal Cultural Resources				
Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center. **Project-Specific Implementation** Pursuant to Project Standard 4 in the PWP, the distance for required cessation of development activities shall be controlled by Section 16.40.040 of the County's Code. Specifically, any property owner who, at any time in the preparation for or process of excavating or otherwise	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	During all ground-disturbing treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
disturbing the ground, discovers any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age, shall cease and desist from all further excavations and disturbances within 200 feet of the discovery.				
Biological Resources				
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants. For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.				
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: ▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and	**Phase I Treatment: Y** **Phase II Treatment: Y** **Treatment Maintenance: Y**	Prior to and during all treatment activities.	RCD/landowner	RCD

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape. ▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation. ▶ No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer. A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.				

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.				
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to	**Phase I Treatment: Y** ▶ California red-legged frog ▶ Mountain lion ▶ Ringtail **Phase II Treatment: Y** ▶ California red-legged frog ▶ Mountain lion ▶ Ringtail ▶ White-tailed kite **Treatment Maintenance: Y** ▶ California red-legged frog ▶ Mountain lion ▶ Ringtail ▶ White-tailed kite	Prior to and during all treatment activities.	RCD/landowner	RCD, CDFW, and/or USFWS/NOAA Fisheries

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

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c. **Project-Specific Implementation** ▶ To avoid mortality, injury, or disturbance to California red-legged frog, pre-treatment surveys will be conducted. ▪ Each week, a pretreatment survey for California red-legged frog will be conducted within the following week's treatment areas by a qualified biologist familiar with the California red-legged frog and its microhabitats to ensure frogs are not present. The qualified biologist will mark areas where frogs are found or likely to occur. ▪ Daily inspection of the day's treatment area will be performed by the qualified biologist, qualified RPF, or supervised trained designee. Prior to implementation of daily inspections, the qualified biologist will conduct a training for other project staff (i.e., qualified RPF or supervised trained designee). The training will include: identification of California red-legged frog, procedures to follow for daily inspection of appropriate habitat features immediately before treatment occurs, and proper procedures to implement if a frog is present (e.g., establish a no-disturbance buffer zone of a size that will appropriately avoid California red-legged frog where treatment will not occur until the frog has left the area, halt activities if a California red-legged frog is observed during treatment, allow California red-legged frogs to move out of the treatment area on their own accord, notify USFWS if California red-legged frogs are observed). ▶ To avoid mortality or injury to mountain lion the following will be implemented. ▪ Nursery habitat suitable for the species will be determined through desktop analyses (e.g., review of land cover, slope, distance from development), coordination with local experts studying or tracking the species (if available), and field surveys. Potential mountain lion dens will include caves, large natural cavities within rocky areas, or thickets deemed appropriate for use by mountain lions based on size and other characteristics (e.g., proximity to human development, surrounding habitat) (Yovovich, pers. comm., 2020).				

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
The qualified wildlife biologist will survey for signs of mountain lion (e.g., tracks, scat, prey items such as a fresh kill) in the vicinity of potential nursery habitat to help determine whether the area may contain a mountain lion nursery. If nursery habitat is confirmed adjacent to (within 2,000 feet of) the Last Chance Road Forest Health Project treatment area, the following additional measures will be applied. If nursery habitat is not identified adjacent to the Last Chance Road Forest Health Project treatment area, no additional measures will be required. ▪ Within 7 days before commencement of treatment activities, a qualified wildlife biologist with familiarity with mountain lion and experience using survey methods for the species will conduct focused surveys in nursery habitat suitable for the species adjacent to (within 2,000 feet of) the Last Chance Road Forest Health Project site to identify any potential mountain lion nurseries. • Within 7 days prior to the start of mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws), a qualified RPF or biologist will inspect suitable nursery habitat in the part of the treatment area scheduled to be treated the following week for mountain lion or signs of mountain lion nurseries. If no mountain lion or sign of a nursery is observed, treatment activities may begin. If signs of a mountain lion nursery are observed, further investigation will be required to determine if a mountain lion nursery is present (see below). • If signs of a mountain lion nursery are found during surveys, further investigation will be required to determine if a mountain lion nursery is present. No treatment will occur in the area while further investigation is occurring. Survey methods will include the use of trail cameras, track plates, hair snares, and/or other noninvasive methods, as well as coordination with local experts tracking the species (if available). Surveys using these noninvasive methods will be conducted for three days and three nights to determine whether a nursery may be present. ▪ If a nursery is known to occur in the area or further signs of a nursery are detected based on the surveys described above (e.g., lactating adult females or cubs on camera, repeated detections of an adult female in the area, growls or calls from cubs), the RCD will implement a no-disturbance buffer of at least 2,000 feet (Wilmers et al. 2013) for a minimum of 10 weeks. Treatment activities will not				

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
occur within this buffer during this time to avoid disturbance, injury, or mortality of mountain lion nurseries. ▶ To avoid mortality or injury to ringtail the following will be implemented when mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws) are implemented during the maternity season (April 15–June 30). ▪ Within 7 days prior to the start of mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws) during the ringtail maternity season, a qualified RPF or biologist will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biologist will search for large trees (i.e., greater than 12 inches dbh) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified RPF will inspect the cavity using a cell phone with a flash, or other tools (e.g., borescopes) to determine whether ringtails are present. Areas (e.g., large trees) with appropriate den habitat, occupied or not, will be marked (i.e., with flagging, spray paint), for inspection during future sweeps (as described below). The qualified RPF or biologist will also search for dens in dense brush habitat and will note any sightings of fleeing adult ringtails. • If active ringtail dens are discovered during a den survey or daily sweep, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws) will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer would incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer. • If active ringtail dens are not discovered, the following measures will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search as well as				

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
injury or mortality of adult ringtails and kits. On the first morning of work for mechanical treatments and manual treatments that use hand-operated power tools (e.g., chainsaws), a qualified RPF or biologist will conduct a sweep of the area to be treated that week and will search all habitat suitable for ringtails where mastication or tree removal will occur that day (i.e., larger trees, heavy brush, rock piles) for active dens or adults, including the trees with cavities previously marked by the qualified RPF or biologist. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens. If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and the requirements described above under "Active Dens" will be followed. ▶ To avoid mortality or injury to white-tailed kite the following will be implemented. ▪ If active white-tailed kite nests are found during SPR BIO-10 surveys, a no-disturbance nest buffer of 0.25 mile would be placed around active white-tailed kite nests, and no treatment activities would occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF. Trees with visible nests will be retained, whether or not the nests occupied.				
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following. Avoid Mortality, Injury, or Disturbance of Individuals ▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:	**Phase I Treatment: Y** ▶ Special-status salamanders ▶ Special-status birds ▶ Pallid bat ▶ San Francisco dusky footed woodrat **Phase II Treatment: Y** ▶ Special-status salamanders ▶ Special-status birds ▶ American badger ▶ Pallid bat	Prior to and during all treatment activities.	RCD/landowner	RCD, and CDFW

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). ▪ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.	▶ San Francisco dusky footed woodrat **Treatment Maintenance: Y** ▶ Special-status salamanders ▶ Special-status birds ▶ American badger ▶ Pallid bat ▶ San Francisco dusky footed woodrat			

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

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

Standard Project Requirements and Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
slopes) will be implemented to avoid injury to or mortality of individual salamanders. If the qualified biologist detects a special-status salamander during treatments, treatment activities will cease until the salamander has left the area or has been moved out of harm's way and to other nearby habitat suitable for the species by the qualified biologist. ▶ If an osprey, Cooper's hawk, or long-eared owl nest is detected during focused surveys, a no-disturbance buffer of at least 500 feet will be established around the nest, and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. Trees with visible nests will be retained, whether or not the nests occupied. ▶ If a pallid bat roost is detected during focused surveys, a no-disturbance buffer of 250 feet will be established around the roost, and no treatment activities will occur within this buffer until the roost is no longer being used as determined by a qualified RPF or biologist. ▶ If an American badger den is detected within treatment areas during focused surveys, a no-disturbance buffer of 100 feet would be established around active maternity dens, and treatments would not occur within this buffer during the pupping season (February 15 – July 1). ▶ If woodrat nests are detected within treatment areas during focused surveys, a no-disturbance buffer of 100 feet would be established around the nests during the breeding season (April through mid-July) to prevent accidental encroachment by vehicles, equipment, or personnel. If woodrat nests within treatment areas cannot be avoided, a qualified biologist will implement nest relocation procedures outside of the woodrat breeding season. The biologist would determine whether the nest is active through live-trapping, dismantle the woodrat nest by hand, and rebuild the nest outside of the treatment footprint.				
Hazardous Materials, Public Health and Safety				
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is	**Phase I Treatment: Y** **Phase II Treatment: N** **Treatment Maintenance: N**	Prior to Phase I treatment activities. Database searches are complete; there are no known hazardous waste sites in the treatment area. See results in the PSA.	RCD	RCD

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

This page intentionally left blank.