

PROJECT-SPECIFIC ANALYSIS AND ADDENDUM TO THE CalVTP PROGRAM EIR

# Alder Creek Sequoia Resilience and Post-Fire Restoration Project

CalVTP I.D. Number 2022-27



Prepared for:



January 2023

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# TABLE OF CONTENTS

Secti	ection				
LIST	OF ABBR	REVIATIONS			
1	INTR	ODUCTION			
	1.1	Project Overview and Document Purpose	1-1		
2	TREA				
_	2.1	Property Description			
	2.2	Proposed Treatments	2-1		
	2.3	Treatment Maintenance	2-9		
3	ENVI	RONMENTAL CHECKLIST	3-1		
4	PROJ	IECT-SPECIFIC ANALYSIS/ADDENDUM			
	4.1	Aesthetics and Visual Resources	4-1		
	4.2	Agriculture and Forestry Resources			
	4.3	Air Quality			
	4.4	Archaeological, Historical, and Tribal Cultural Resources			
	4.5	Biological Resources			
	4.6	Geology, Soils, Paleontology, and Mineral Resources			
	4.7	Greenhouse Gas Emissions			
	4.8	Energy Resources			
	4.9	Hazardous Materials, Public Health and Safety			
	4.10	Hydrology and Water Quality			
	4.11	Land Use and Planning, Population and Housing			
	4.12	Noise			
	4.13	Recreation			
	4.14	Transportation			
	4.15	Public Services, Utilities and Service Systems			
	4.16	Wildfire	4-73		
5	LIST	OF PREPARERS	5-1		
6	REFE	RENCES	6-1		
٨++-	chmon	te			
		us Instign Monitoring and Panarting Program			
A D	IVIIUG				
Б С	BIOIO	yildi Resources			
C	Haza				
Figu	ures				

Figure 1-1	Regional Location1	-2
Figure 2-1	Project Area2	-2

#### Tables

Table 2-1	Proposed CalVTP Treatments	2-5
Table 4.5-1	Habitat Types in the Project Area	4-19
Table 4.5-2	Special-Status Plant and Wildlife Species with Potential to Occur in the Project Area	4-20
Table 4.5-3	Sensitive Natural Communities Documented or with Potential to Occur in the Project Area	4-35

# LIST OF ABBREVIATIONS

Board	California Board of Forestry and Fire Protection
CAAQS	California ambient air quality standard
Cal-IPC	California Invasive Plant Council
CalVTP	California Vegetation Treatment Program
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
dbh	diameter at breast height
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EVEG	Existing Vegetation
GHG	greenhouse gas
НСР	habitat conservation plans
IAP	Incident Action Plan
League	Save the Redwoods League
MMRP	mitigation monitoring and reporting program
NAAQS	national ambient air quality standard
NAHC	Native American Heritage Commission
NCCP	natural community conservation plans
NOA	naturally occurring asbestos
PEIR	Program Environmental Impact Report
property	Alder Creek property
proposed project	Alder Creek Sequoia Resilience and Post-Fire Restoration Project
PSA	Project-Specific Analysis
ROG	reactive organic gas
SENL	single event noise levels
SNC	Sierra Nevada Conservancy
SPR	standard project requirements
SQF Complex	Sequoia Complex Fire
SRA	State Responsibility Area
SSJVIC	Southern San Joaquin Valley Information Center
ТАС	Toxic air contaminants

USFS	US Forest Service
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
UTV	utility terrain vehicle
VMT	vehicle miles traveled

# 1 INTRODUCTION

# 1.1 PROJECT OVERVIEW AND DOCUMENT PURPOSE

The California Board of Forestry and Fire Protection (Board) certified the Program Environmental Impact Report (PEIR) for the California Vegetation Treatment Program (CalVTP) in December 2019. The PEIR evaluates the potential environmental effects of implementing vegetation treatments throughout the State Responsibility Area (SRA) in California. This document is a Project-Specific Analysis (PSA) and Addendum to the PEIR (PSA/Addendum). The PSA process was designed during PEIR preparation for use by many state, special district, regional, and local agencies to help increase the pace and scale of vegetation treatment by employing California Environmental Quality Act (CEQA) streamlining tools (i.e., a within-the-scope finding based on the PSA). An addendum to the PEIR is another CEQA streamlining tool designed to address those project components that are not within the scope of the PEIR. This PSA/Addendum comprises the joint implementation of these CEQA streamlining tools in a single document.

To assist with this effort, the Board is supporting the preparation of PSAs and PSA/Addenda to create a library of example projects that help guide state and local agencies in preparing their own PSAs and PSA/Addenda under the CalVTP PEIR, as well as to achieve CEQA compliance for the Alder Creek Sequoia Resilience and Post-Fire Restoration Project (proposed project). The Board selected the vegetation treatment project proposed by Save the Redwoods League (League) to be one of the PSA/Addenda that provides CEQA compliance for project approval and implementation and serves as an example for other agencies seeking to use the CalVTP PEIR to accelerate approval of their own vegetation treatment projects.

The League would implement the proposed project, which includes vegetation treatments on up to 530 acres of land in the Alder Creek property. The League has applied to the Sierra Nevada Conservancy (SNC) for a grant to implement some of these treatments on a portion of the property, as described in additional detail in Section 2.2, "Proposed Treatments." This PSA/Addendum comprehensively analyzes all the activities that would be implemented throughout the property to increase wildfire and forest resilience. However, SNC would use this PSA/Addendum in its consideration of whether to approve the grant funding for the activities and area that are identified in the League's grant application. This PSA/Addendum may be relied upon for CEQA compliance in the future by other agencies with a discretionary approval pertaining to the activities and area covered herein. Refer to Section 1.1.2, "Agency and Organization Roles," and Section 1.1.3, "Purpose of the PSA/Addendum," for additional information.

# 1.1.1 Proposed Project

The League proposes to implement the proposed project on up to 530 acres of land on the Alder Creek property located immediately east of the community of Sequoia Crest, 3 miles north of Camp Nelson in Tulare County (Figure 1-1). The proposed treatment types are fuel break and ecological restoration, and the proposed treatment activities would include prescribed burning, manual and mechanical treatments, and herbicide application. Ongoing maintenance of initial treatments would involve the same vegetation treatment types and activities used in the initial treatment.



Sources: Data received from the League in 2022; adapted by Ascent in 2022.

#### Figure 1-1 Regional Location

# 1.1.2 Agency and Organization Roles

This document is being prepared for the League for use by a state or local agency with a discretionary approval pertaining to implementation of wildfire and forest resilience activities on the Alder Creek property. The League has applied to SNC, for a Wildfire Recovery and Forest Resilience grant. SNC will act as the CEQA lead agency, using this PSA/Addendum for the portions of the proposed project that would be implemented using funding from the grant; these portions are referred to in this PSA/Addendum as those for which the League is "seeking SNC funding." SNC will use this PSA/Addendum in its consideration of whether to approve grant funding for the League to those portions of the proposed project identified in its grant application.

The portions of the proposed project for which the League is seeking SNC funding include treatment activities implemented within the portion of the project area that was not burned at high severity during the 2020 Castle Fire— one of two fires in the Sequoia Complex Fire (SQF Complex) that burned in the Sequoia National Forest, Giant Sequoia National Monument, and adjacent areas. The portions of the proposed project seeking SNC grant funding also include all fuel break treatments, road repair, and road decommissioning throughout the project area. The "Habitat Improvement/Fire Resiliency Treatment Areas (Seeking SNC Funding)" section, "Fuel Breaks" section, Section 2.2.3, "Road Repair," and Section 2.2.4, "Road Decommissioning," in Section 2, "Treatment Description," explicitly focus on portions of the project that are seeking SNC funding. General descriptions of the types of activities that could occur as part of those treatments and activities are further described under the "Ecological Restoration," section, Section 2.2.2, "Treatment Activities," and Section 2.3, "Treatment Maintenance."

As defined in the CalVTP PEIR, a project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. The PEIR contemplated that the primary discretionary approval of the public agency project proponent would be implementing the treatments and associated standard project requirements (SPRs) and mitigation measures. However, for this proposed project, SNC's discretionary approval is to provide approval for grant funding and the League will be implementing treatments and associated SPRs and mitigation measures. Accordingly, the League is referred to as the "implementing entity," reflecting its role as the lead implementer of treatments and landowner of the property. Furthermore, SNC is delegating implementation of standard project requirements (SPRs), mitigation, and monitoring to the League; thus, SNC has delegated the role of "project proponent" to the League. Where "project proponent" is used in this PSA/Addendum, that role will be fulfilled by the League. This PSA/Addendum may be relied upon for CEQA compliance in the future by other agencies, acting in a lead or responsible agency role, with a discretionary approval pertaining to the activities and area covered herein, including for public funding through other sources or future SNC grants.

# 1.1.3 Purpose of the PSA/Addendum

This document serves as a PSA to evaluate whether the proposed treatments would be within the scope of the CalVTP PEIR. As stated above, the treatment types and treatment activities are consistent with the CalVTP. Among the other criteria for determining whether a treatment project is within the scope of the CalVTP PEIR is whether it is within the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the PEIR). If a proposed vegetation treatment project is covered by the evaluation of environmental effects in the PEIR, it may be approved using a finding that the project is within the scope of the PEIR for its CEQA compliance, consistent with CEQA Guidelines Section 15168(c)(2).

An Addendum to an EIR is appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts, consistent with CEQA Section 21166 and CEQA Guidelines Sections 15162, 15163, 15164, and 15168. In this case, there are no changed circumstances, but the proposed revisions or changes in the project, compared to the PEIR, are the inclusion of areas outside of and adjacent to the CalVTP treatable landscape, revisions to standard project requirements (SPRs) and mitigation measures, and inclusion of road decommissioning (see "Proposed Project Revisions" below).

The PSA checklist (refer to Section 4, "Project-Specific Analysis/Addendum") includes the criteria to support an Addendum to the CalVTP PEIR for the project revisions identified below. The checklist evaluates each resource in terms of whether the later treatment project, including the "changed condition" of additional geographic area, revisions to SPRs and mitigation measures, and additional activities, would result in significant impacts that would be substantially more severe than those covered in the PEIR or would result in any new impacts that were not covered in the PEIR.

This document serves as both a PSA and an Addendum to the CalVTP PEIR agency review and analysis under CEQA regarding the proposed Alder Creek Sequoia Resilience and Post-Fire Restoration Project within and outside the treatable landscape covered by the PEIR, including the proposed revisions described below. It provides environmental information supported by substantial evidence to SNC in its consideration of approving grant funding allocations and implementation of the project by the League or its contractor(s). The project-specific mitigation monitoring and reporting program (MMRP), which identifies the CalVTP SPRs and mitigation measures applicable to the proposed project is presented in Attachment A. The SPRs identified in the MMRP have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

## PROPOSED PROJECT REVISIONS

#### Project Area Outside the CalVTP Treatable Landscape

Among the criteria for determining if a treatment project is within the scope of the CalVTP PEIR is whether it is located in the CalVTP treatable landscape (i.e., the geographic extent of analysis covered in the PEIR). While the majority of the project area would be inside, portions of the project area would extend outside of the treatable landscape described in the CalVTP PEIR. In total, the areas outside of the treatable landscape encompass 48 acres of the 530-acre project area. These areas are dispersed in small sections of the treatable landscape is due to the method by which the CalVTP treatable landscape was digitally developed and the resultant degree of mapping resolution. Using desktop applications to apply buffers around geographic and topographic features and demarcate jurisdictional boundaries (i.e., SRA and Local Responsibility Area [LRA]), the method resulted in some treatable landscape have essentially the same, or at least substantially similar, landscape conditions as the adjacent areas within the treatable landscape, the environmental information in the PEIR would be applicable to the adjacent areas.

#### Proposed Revisions to CalVTP SPRs and Mitigation Measures

While the proposed treatment types and treatment activities would be consistent with the CalVTP, the League has deemed that certain requirements of CalVTP SPRs would be infeasible, are not warranted to maintain the impact significance conclusions in the PEIR, and, if implemented as presented in the PEIR, would prevent the League from meeting treatment objectives. Because SPRs are part of the CalVTP and are incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation, revisions (beyond clarifying edits) would constitute a change to the CalVTP PEIR's description of later project activities.

Revisions to mitigation measures would also constitute a change to the CalVTP PEIR. CEQA Guidelines Section 15168(c)(3) requires incorporation of feasible mitigation when approving later activities. If the mitigation measure is simply "incorporated" (i.e., without revision), it would contribute to a within the scope finding. If revisions to a mitigation measure are proposed, it could be evaluated within an Addendum pursuant to CEQA Guidelines Section 15164. This can occur either because the change is simply a clarification or other revision that does not meet the requirements for supplemental or subsequent review in CEQA Guidelines Section 15162; or it is a case, as explained in CEQA Guidelines Section 15162(a)(3)(D), where a mitigation measure is "considerably different" from those in the PEIR, would substantially reduce significant effect(s), and the proponent will adopt it as part of the project.

The proposed revisions to SPRs AQ-3, AQ-6, and HYD-2 and Mitigation Measure BIO-2a are described below. These proposed revisions would not result in any new or substantially more severe significant impacts on any of the resources evaluated in the PEIR and described in this PSA/Addendum. Evidence to explain this conclusion is presented under each applicable resource, as summarized below and presented throughout Section 4.

#### SPR AQ-3 Create Burn Plan

SPR AQ-3, as presented in the PEIR, requires preparation of a burn plan using the CAL FIRE burn plan template prior to prescribed burning treatment activities. Pursuant to SPR AQ-3, the burn plan will include a fire behavior model performed by a qualified fire behavior technical specialist, will minimize soil burn severity from prescribed burning to reduce the potential for runoff and soil erosion, and will be created with input from a qualified technician or certified State burn boss.

The League proposes to prepare burn plans prior to prescribed burning activities using burn plan templates recommended by the US Forest Service (USFS), which is consistent with the League's current practices for prescribed burning and because the project area is located in the direct protection area of USFS. The CAL FIRE Prescribed Fire Guidebook provides the template and required elements of CAL FIRE burn plans: a description of the burn area; target weather conditions; hazards that may be encountered; personnel needs, safety, and contacts to make prior to burning; and short- and long-term management goals (CAL FIRE 2019). The burn plan templates proposed to be used by the League contain all of these elements. In addition to these elements, the League proposes to include elements in the burn plan that are required to obtain burn permits and any additional elements that are needed to design a burn that will minimize soil burn severity from prescribed burning to reduce the potential for runoff and soil erosion. This may, but is not required to, include outputs from fire behavior modeling programs.

Potential impacts resulting from revisions to SPR AQ-3 are discussed below under Section 4.1, "Aesthetics and Visual Resources," Section 4.3, "Air Quality," Section 4.5, "Biological Resources," Section 4.6, "Geology, Soils, Paleontology, and Mineral Resources," Section 4.7, "Greenhouse Gas Emissions," Section 4.10, "Hydrology and Water Quality," and Section 4.16, "Wildfire." As explained in these sections, the proposed revisions to SPR AQ-3 would not result in any new or substantially more severe significant impacts than were analyzed in the PEIR. Impacts on other resources would not occur as a result of these revisions, because SPR AQ-3 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR AQ-3 are shown in underline and strikethrough in the MMRP (Attachment A).

#### SPR AQ-6 Prescribed Burn Safety Procedures

SPR AQ-6, as presented in the PEIR, requires non-CAL FIRE crews to implement all safety procedures required of CAL FIRE crews. This includes implementation of an approved Incident Action Plan (IAP), and outlines the elements required in the IAP.

To maintain public safety consistent with the League's current prescribed burn practices, the League proposes to revise SPR AQ-6 to conduct a safety briefing with all personnel resources on site for each operational period for all prescribed burning treatments to ensure personnel safety considerations and prescribed fire objectives. If deemed necessary by a burn boss or qualified technician, one day prior to ignition, the League would prepare an IAP and associated maps. IAP elements may include burn organization and assignments, prescribed fire objectives and prescription, description of the prescribed fire area, expected weather and fire behavior, communications, ignition plan, holding plan, contingency plan and assignments, wildfire declaration, and safety and medical plans. All assigned personnel for a prescribed burn will be briefed to ensure personnel safety and covey prescribed fire objectives.

Potential impacts resulting from revisions to SPR AQ-6 are discussed below under Section 4.3, "Air Quality." As explained in this section, the proposed revisions to SPR AQ-6 would not result in any new or substantially more severe significant impacts than were analyzed in the PEIR. Impacts on other resources would not occur as a result of these revisions, because SPR AQ-6 is not required to reduce environmental effects to any other resources from implementation of the project. The proposed revisions to SPR AQ-6 are shown in underline and strikethrough in the MMRP (Attachment A).

#### SPR HYD-2

SPR HYD-2 prohibits construction or reconstruction (i.e., involving less than 50 cubic yards of cut or fill and/or 0.25 linear road mile) of any new roads, including temporary roads.

The League proposes to implement road repair activities, which would consist of road resurfacing (i.e., grading, fill) along 0.04 linear road mile and minor road repair along 5.7 miles of existing unpaved roads within the project area. Portions of these roads were damaged during the 2020 Castle Fire and are no longer easily passable by vehicles used for League access on the project area or for implementation of vegetation treatment activities. Because these roads are susceptible to erosion in their current deteriorated conditions, the proposed road repair is necessary to minimize erosion impacts that could be exacerbated by vehicle use during implementation of the proposed project. These roads, which are devoid of vegetation, also function as fuel breaks. The types of equipment used for the road repair activities would be similar to the types of equipment used for the mechanical treatments described in the PEIR, including wheeled tractors, skid steers, and excavators.

The League's proposed road repair activities (e.g., grading, application of gravel to portions of existing unpaved roads, cut and fill to repair damage to existing roads) would be prohibited by SPR HYD-2. Thus, the proposed project road repair activities would require a revision to the types of road construction activities restricted by SPR HYD-2. Without this revision to SPR HYD-2, the objective to reduce wildfire risk by maintaining these roads as fuel break, to facilitate access (e.g., operational, evacuation, and wildfire suppression access), and implement vegetation treatments could not be achieved. See Section 2.2.3, "Road Repair," below for more information regarding the importance of the proposed road repair activities in achieving the restoration and fuel break goals of the project.

As described in the CalVTP PEIR, use of heavy equipment (e.g., wheeled tractors, skid steers, excavators, dozers and dozer transport, tow chippers, track chippers, masticators) for mechanical vegetation removal activities could result in ground disturbance that is similar in character and intensity as proposed road repair and would result in similar impacts. Potential impacts resulting from revisions to SPR HYD-2 are discussed below under Section 4.10, "Hydrology and Water Quality," and Section 4.14, "Transportation" because these resource areas rely on this SPR to avoid and minimize impacts. Additionally, impacts to Geology, Soils, Paleontology and Mineral Resources (refer to Section 4.6) are analyzed given the potential for this activity to exacerbate erosion or landslide potential through ground disturbance. As explained in these sections, the proposed revisions to SPR HYD-2 would not result in any new, or substantially more severe significant impacts than were analyzed in the PEIR. Impacts on other resources would not occur as a result of this revision, because SPR HYD-2 is not required to reduce or avoid environmental effects to any other resources from implementation of the project. The proposed revisions to SPR HYD-2 are shown in underline and strikethrough in the MMRP (Attachment A).

#### Mitigation Measure BIO-2a

Mitigation Measure BIO-2a requires avoidance of mortality, injury, or disturbance and maintenance of habitat function for wildlife species listed under the federal or state endangered species act and for California fully protected species. Among other requirements, Mitigation Measure BIO-2a requires consultation with USFWS for species listed under the federal Endangered Species Act. The objective of the consultation required under Mitigation Measure BIO-2a is to identify the period of time within which treatment could occur that would avoid injury, disturbance, or mortality of the species, and identify measures to maintain habitat function. The League is proposing to implement measures from USFWS' programmatic biological opinion on USFS projects for the Southern Sierra Nevada Distinct population segment of the fisher (USFWS 2020), which are designed to avoid injury, mortality, disturbance, and significant habitat modification or degradation.

Revisions to Mitigation Measure BIO-2a are proposed regarding requirements to consult with USFWS for fisher because the measures from the biological opinion would be applied to the proposed project to avoid and minimize adverse effects on fisher. The availability of a recent biological opinion with measures that have been previously vetted and recommended by USFWS to avoid adverse effects on fisher in similar habitats for similar vegetation treatment projects provides the information that would be otherwise gained in the consultation. Therefore, additional consultation requirements with USFWS pursuant to the CalVTP PEIR would not be needed for the proposed project. Mitigation Measure BIO-2a would be revised to require consultation with USFWS only if the measures in Mitigation

Measure BIO-2a are determined to be infeasible. If the habitat retention measures are infeasible, USFWS would be contacted to seek technical input on the determination that habitat function would be maintained for fisher and input on their proposed measures to avoid injury to or mortality of this species.

Potential impacts resulting from revisions to Mitigation Measure BIO-2a are discussed below under Section 4.5, "Biological Resources," because this resource area relies on this mitigation measure to mitigate potentially significant impacts on fisher. As explained in this section, the proposed revisions to Mitigation Measure BIO-2a would not result in any new, or substantially more severe significant impacts than were analyzed in the PEIR. Impacts on other resources would not occur as a result of this revision, because Mitigation Measure BIO-2a is not required to mitigate environmental effects to any other resources from implementation of the project. The proposed revisions to Mitigation Measure BIO-2a are shown in underline and strikethrough in the MMRP (Attachment A).

#### Road Decommissioning

The League is proposing to decommission certain roads and skid trails to achieve their restoration goals. Some existing roads and skid trails in the project area are proposed for decommissioning to prevent erosion and increase continuity of appropriate ground vegetation. The road decommissioning activities would consist of blocking entranceways, revegetation, installing waterbars, removing fill, stabilizing drainageways, removing unstable road shoulders, and recontouring and restoring natural slopes along 100-150 feet of existing road and skid trails. Road decommissioning was not included in the PEIR, although it aligns with the objectives of the CalVTP ecological restoration treatment type.

Implementation of road decommissioning activities would require heavy equipment similar to the types of equipment that would be required for mechanical treatments as analyzed in the CalVTP PEIR, including dozers and front-end loaders. As described in the CalVTP PEIR, use of heavy equipment (e.g., wheeled tractors, skid steers, excavators, dozers and dozer transport) for mechanical vegetation removal activities could result in ground disturbance that is similar in character and intensity as proposed road decommissioning and would result in similar impacts. Without this change to the CalVTP, the League's restoration goals for the project area could not be achieved. See Section 2.2.3, "Road Decommissioning," below for more information regarding the importance of the proposed road decommissioning activities in achieving the restoration goals of the project. Potential impacts resulting from the addition of this activity are analyzed in each relevant resource area in Section 4, "Project-Specific Analysis/Addendum."

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# 2 TREATMENT DESCRIPTION

The proposed project consists of vegetation treatments within Save the Redwoods League's (League's) Alder Creek property (property). The CalVTP treatment types that would be implemented are ecological restoration and fuel break, and proposed treatment activities to implement the proposed project would include manual and mechanical treatments, prescribed burning, and herbicide application. The proposed CalVTP treatments are shown in Figure 2-1 and are summarized in Table 2-1, below.

# 2.1 PROPERTY DESCRIPTION

The Alder Creek property is 530 acres and located immediately east of the community of Sequoia Crest, 3 miles north of Camp Nelson in Tulare County (refer to Figure 1-1). CalVTP treatments would occur within the entire project area. The property includes the Alder Creek grove of giant sequoia (*Sequoiadendron giganteum*), one of 76 sequoia groves in the world. It is surrounded almost entirely by the Giant Sequoia National Monument, administered by the Sequoia National Forest. The property is adjacent to the community of Sequoia Crest, which consists of 55 homes. The property also contains a human-made lake, Poppy Lake, and water company infrastructure. The lake is frequented by community members from Sequoia Crest and surrounding communities, and the water is used to supply the community of Sequoia Crest.

The Alder Creek property is home to the Stagg Tree, the fifth known largest tree on the planet by volume. The property has been open for public visitation for several decades with thousands of visitors every year and has become one of the most visited sites in the area. Visitation occurs during all months of the year, including snowshoe and skiing visitors in the winter. Several different research projects and surveys of the property are ongoing or in the planning phases by the League or other groups, including several academic institutions and non-governmental organizations.

The property was purchased by the League from private ownership in 2019. At the time it was the largest privately owned sequoia grove left in the world. The League intends to restore characteristics of a healthy forest ecosystem where natural fire processes can be reestablished through naturally occurring wildfire or human prescription.

The Castle Fire burned the Alder Creek property in 2020, with approximately 245 acres of the 530-acre property experiencing high-severity fire, including the area around Poppy Lake. These high-severity burned areas have been undergoing site preparation by the League in anticipation of a reforestation planting in 2023. The planting would include an experimental planting conducted by the University of California, Berkeley, School of Forestry, to investigate methods for planting giant sequoia seedlings and differences in seed stock from different groves. The results of this research could provide guidance to other sequoia reforestation efforts throughout the range.

# 2.2 PROPOSED TREATMENTS

The proposed project involves two CalVTP vegetation treatment types: ecological restoration and fuel break. The CalVTP vegetation treatment activities proposed to implement each of these treatment types are mechanical treatments, manual treatments, prescribed fire treatments, and herbicide application. Road repair and road decommissioning activities (see Section 1.1.3, "Purpose of the PSA/Addendum") are also part of the proposed project. The treatment types, road repair, road decommissioning, and treatment activities proposed within two treatment areas are described below.



Sources: Data received from the League in 2022; adapted by Ascent in 2022.

#### Figure 2-1 Project Area

# HABITAT IMPROVEMENT/FIRE RESILIENCY TREATMENT AREAS (SEEKING SNC FUNDING)

Habitat improvement and fire resiliency treatments would be implemented on 276 acres of the project area (see Figure 2-1), in the areas that were not burned at high severity during the 2020 Castle Fire. The area identified for habitat improvement and fire resiliency treatments areas generally consist of most of the northern portion of the project area, with the exception of the northwest and northeast corners. All acres are in forested areas heavily influenced by a long history of fire suppression. This treatment would consist of the ecological restoration and fuel break treatment types, and proposed treatment activities are primarily manual treatment, mechanical treatment, prescribed burning (i.e., broadcast burning, pile burning, air curtain burning), and herbicide treatment of nonnative vegetation. Fuel break treatments would also extend through portions of the project area that burned at high severity in the Castle Fire. Heavy equipment may be used to create and maintain this fuel break. The League is seeking SNC grant funding to complete manual and mechanical vegetation treatment, fuel break, road repair, and road decommissioning activities and prescribed burning on these 276 acres and along the existing roads throughout the entire project area.

# BURNED AREA RESTORATION AND RECOVERY TREATMENT AREAS (OTHER FUNDING SOURCES)

Following the 2020 Castle Fire, restoration and recovery (e.g., erosion control and tree removal) in the high-severity burn area began in 2021. Under the proposed project, this PSA covers implementation of ongoing restoration and recovery treatments on the 245 acres that burned at high severity during 2020. This treatment would consist of the ecological restoration treatment type. Proposed treatment activities would primarily include herbicide treatments, pile burning, and mechanical treatment. Few to no live trees remain in this area. This treatment would include mechanical treatment (i.e., chipping), prescribed burning (i.e., burning of dead [previously burned] fuels using pile burning and air curtain burning), and herbicide treatment of nonnative vegetation within the high-severity burn area. All project activities within this portion of the project area, with the exception of fuel break and road repair work on existing roads in this area, would be funded through future funding sources that have not yet been requested or obtained. Future funding sources could include additional SNC grant funding but is not part of the current SNC grant funding approval.

# 2.2.1 Treatment Types

The proposed treatment types consist of ecological restoration and fuel break treatments. Each treatment type is described in more detail below and is consistent with the treatment types described in the CalVTP. Both treatment types would occur throughout the project area. Refer to Figure 2-1 for the location of each treatment type within the project area. Table 2-1 provides the acres of each treatment within the project area.

## ECOLOGICAL RESTORATION

Ecological restoration would focus on restoring ecosystem processes, conditions, and resiliency by moderating uncharacteristic wildland fuel conditions to reflect historic vegetative composition, structure, and habitat values. Ecological restoration would involve vegetation treatments that seek to restore historic landscape level processes such as fire in order to promote ecological resilience and improve habitat quality. Restoration may include habitat remediation where non-native, invasive plants have spread, and excess fuel buildup has occurred. It is also the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed by destructively intense wildfire.

The proposed project would implement ecological restoration treatments for the dual purpose of wildfire risk reduction and enhancement of natural habitats. Consistent with the CalVTP ecological restoration treatment type, the League's proposed ecological restoration treatments would seek to promote resilient conditions where natural fire processes can be reestablished and habitat quality can be improved, including reducing excess fuel building and controlling and eliminating nonnative, invasive plants including bull thistle (*Cirsium vulgare*), wooly mullein (*Verbascum thapsus*), and others. Specific restoration objectives include promoting forest health and resiliency by removing trees killed by beetles, wildfire, and drought, removing heavy brush and invasive species, and providing ecosystem and habitat improvements to increase fire resiliency and to promote the improvement of habitat for special-status species including the fisher (*Pekania pennanti*) and California spotted owl (*Strix occidentalis occidentalis*).

Based on historic data, we understand that forest characteristics in the southern Sierra Nevada mountains have changed considerably in the past century. Fire suppression and exclusion of Indigenous stewardship practices has significantly increased understory tree density and shifted species composition in many areas. Due to fire exclusion, shade intolerant trees such as giant sequoia and ponderosa pine (Pinus ponderosa) had a harder time regenerating and establishing due to altered forest conditions. Therefore, species composition in mixed conifer forests has shifted to a higher density of shade tolerant trees such as white fir (Abies concolor), and incense cedar (Calocedrus decurrens), due to forest densification following fire exclusion. Dense forest conditions and changing species composition has led to fuel continuity from the understory to the canopy and increased understory fuel buildup that increases potential to burn at high severity under shifting weather patterns. Although high-severity fire has always been present within an intact fire regime in Sierra Nevada mixed conifer zone, patch size, and frequency of uncharacteristically large high-severity patches have increased leading to a significant pulse of mortality on the landscape in a short period of time. These large contiguous patches of high severity can lead to regeneration failure for all species, including shade intolerant species such as giant sequoia and ponderosa pine, and can lead to type conversion on the landscape. In conjunction with significant overstory mortality of mixed conifer species and mature giant sequoia, and past logging of sugar pine, there is potential for species shifts and type conversion on the Alder Creek property and within the grove. Areas that burned at high severity have the potential to reburn more frequently at high severity leading to changes in vegetation structure and composition. Thus, fuels reduction and ecological restoration would increase resilience to future fire, decrease potential for re-entry of high-severity fire, and reduce wildfire risk to the grove and surrounding community while establishing a young mature forest for future benefit while restoring ecosystem services provided by an intact and resilient landscape.

# FUEL BREAKS

In strategic locations, fuel breaks create zones of vegetation removal and ongoing maintenance, often in a linear layout, that support fire suppression by providing responders with a staging area or access to a remote landscape for fire control actions. Fuel breaks created as part of the CalVTP would assist active suppression efforts and are not designed to passively prevent or control wildfires. Fuel breaks create strategic control points to allow firefighters to safely engage a wildfire, improving opportunities to control wildfire in the initial attack phase and prior to it reaching communities. Additionally, fuel breaks are used to allow responders to reach the leading edges of a wildfire and increase protection of isolated communities and of natural resources. Fuel breaks also serve as critical features to allow the safe reintroduction of prescribed fire.

The project would include the implementation of fuel breaks on eight unpaved roads (12-feet wide) within the project area. Vegetation would be removed from existing, unpaved roads in the project area that have become overgrown to establish and maintain fuel breaks. Roads would be cleared of standing dead and dying/burned as well as live vegetation. Heavy equipment may be used to create and maintain fuel breaks. Due to the linear nature of the proposed treatments within existing roads, the roadside fuel reduction would reduce risk of wildfire ignition and spread to natural resources and communities at risk, improve evacuation route safety and allow for safe ingress and egress by emergency response vehicles, support fire suppression efforts, and concurrently provide access to implement vegetation treatment in the area.

CalVTP Treatment Type	Treatment Size (acres)	CalVTP Treatment Activity	Equipment Used for Treatments	Timing of CalVTP Treatments
		Manual and mechanical (cutting, biomass chipping)	5 chainsaws or hand saws, 5 brush cutters, 1 chipper	5/2023 - 11/2023 5/2024 - 11/2024 5/2025 - 11/2025 5/2026 - 11/2026 5/2027 - 11/2027 5/2028 - 11/2028
Ecological Restoration	521 (276 acres seeking SNC funding, 245 acres other funding sources)	Prescribed Burning (air curtain burners/pile burning/broadcast burning)	Tools deemed necessary by a qualified burn boss, including chainsaws and various hand tools, 1 large air curtain burner, 2 small air curtain burners	10/2023 - 6/2024 10/2024 - 6/2025 10/2025 - 6/2026 10/2026 - 6/2027 10/2027 - 6/2028 10/2028 - 6/2029
		Herbicide application	Manual backpack style sprayers	3/2023 – 11/2028
Fuel Break	9 (9 acres seeking SNC funding, 0 acres other funding sources)	Manual and mechanical (cutting, biomass chipping)	5 chainsaws or hand saws, 5 brush cutters, 1 chipper	5/2023 - 11/2023 5/2024 - 11/2024 5/2025 - 11/2025 5/2026 - 11/2026 5/2027 - 11/2027 5/2028 - 11/2028
Total Acres			530	

Table 2-1	<b>Proposed CalVTP Treatments</b>

Source: Data and information provided by Save the Redwoods League in 2022.

# 2.2.2 Treatment Activities

The proposed vegetation treatment activities are prescribed burning, mechanical treatment, manual treatment, and targeted ground application of herbicides. Each of these treatment activities is described in more detail below and consistent with the treatment activities described in the CalVTP. Table 2-1 provides a summary of treatments.

Treatments would be scheduled to begin in spring 2023 depending on funding, equipment/contractor availability, weather conditions, and other restrictions. Treatments could occur year-round, except on days with extreme fire danger. Prescribed burning would generally not occur during the CAL FIRE-designated fire season or no-burn season. Although there is the potential for prescribed burning to occur during nighttime and weekend hours, all treatment activities using equipment would be limited to daytime hours on Monday through Friday, typically between approximately 7:00 a.m. and 7:00 p.m., depending on season and proximity to residences.

## MECHANICAL VEGETATION TREATMENT

The only mechanical treatment activity proposed under this project is the use of chippers to process biomass from manual treatment activities. Typically, treatments would require several days to several months to complete. Equipment would be operated on existing roads or landings or on flat to moderate slopes in ecological restoration and fuel break treatment areas. Although mechanical vegetation treatment would be limited to chipping, the road repair and road decommissioning activities would be implemented using some of the equipment that is used in mechanical treatments, as described in the CaIVTP PEIR and in Sections 2.2.3 and 2.2.4 of this PSA/Addendum.

# MANUAL VEGETATION TREATMENT

Manual treatment would be implemented for ecological restoration and fuel break treatment types. To implement manual treatments, crews of approximately two to 10 members would use hand tools and hand-operated power tools. To implement manual treatments, hand tools and hand-operated power tools, including chainsaws, hand saws, and/or brush cutters, would be used to cut, clear, or prune herbaceous and woody species (see details in Table 2-1). Activities would include tree thinning and removal, invasive plant removal, and heavy shrub removal. Typically, treatments would require several days to several months to complete, depending on the treatment size, steepness of terrain, and type and density of vegetation. The prescription for manual treatments would include:

- ▶ retain a minimum of 40 percent of canopy cover where feasible;
- remove live conifer trees up to 30 inches diameter at breast height (dbh) or less, and remove live hardwoods up to 20 inches dbh;
- remove dead trees, leaving a minimum of one to two standing dead trees per acre;
- remove target shrubs (e.g., manzanita [Arctostaphylos spp.], mountain whitethorn [*Ceanothus cordulatus*], red osier dogwood [*Cornus sericea*]);
- maintain at least 10 to 20 percent relative final density of shrub vegetation in a mosaic of shrubs and understory vegetation within tree dominated habitats;
- ▶ protect monarch giant sequoias and other old, fire-resistant trees;
- ▶ prepare the property for the reintroduction of prescribed fire on a recurring basis (i.e., every 10-15 years); and
- ► to the extent feasible, retain giant sequoia and other species as determined by the League. The primary and secondary criteria for determining whether a species should remain include its level of association with beneficial organisms (e.g., pollinators) and if it is a species with characteristics qualifying it as a sensitive natural community, respectively.

#### PRESCRIBED BURNING

Prescribed burning typically consists of pile burning and broadcast burning.

- ▶ Pile burning<sup>1</sup>: Biomass from manual and mechanical treatment would be piled using equipment (e.g., skid steer, tractor, bulldozer or excavator) or hand crews and burned appropriately. Typically, dozers are equipped with a brush rake to reduce soil displacement and create "clean" piles. Pile burning would occur in an understory or in areas with little to no live overstory, including areas that have experienced previous wildfire. SPR GEO-6 requires burn piles to not occupy more than 15 percent of the total treatment area.
- Broadcast burning: Broadcast burning would be used to promote forest health and native flora and reduce biomass and fuel loading in grassland, woodland, and forest vegetation. Pretreatment of vegetation using mechanical and manual activities or herbicide application would occur in areas proposed for prescribed burning. Prescribed burning in the grassland areas would help control nonnative plant species and reduce fine fuels. These treatments would also promote a more natural, sustainable, and wildfire resilient native landscape. Prescribed broadcast burning would be conducted on as much of the 530 acres as possible in consideration of environmental and regulatory constraints.

<sup>&</sup>lt;sup>1</sup> Pile burning is a mechanism to consume biomass; however, the impact analysis in the CalVTP PEIR considers pile burning under prescribed burning to account for similar impacts as broadcast burning, which is also considered under prescribed burning. Similarly, mastication and chipping are biomass processing methods that are have similar impacts to and are considered under mechanical treatments.

<sup>&</sup>lt;sup>2</sup> Air curtain burners have been designed to consume biomass quickly and efficiently with a substantial reduction in smoke compared to pile burning (refer to additional information in Section 4.3, "Air Quality," and Section 4.7, "Greenhouse Gas Emissions"). Mitigation Measure GHG-2 in the CalVTP PEIR requires implementation of feasible methods, including the use of air curtain burners, to reduce the greenhouse gas (GHG) emissions from pile burning.

When possible, biomass from mechanical and manual treatments would be disposed of using **air curtain burning**<sup>2</sup>. An air curtain burner, which could include the "BurnBoss" and/or "FireBox," would be used to disposed of biomass. These units range in size. The BurnBoss is a small, highly mobile self-contained kiln that can be towed with a standard heavy-duty pickup truck. The FireBox is a larger unit that can be transported using a trailer. A small Environmental Protection Agency (EPA) Tier 4 diesel engine powers these systems, which consumes one-third of a gallon of diesel fuel per hour at full power. Biomass would be carried from the work sites to the burner and hand fed into the air curtain burner. Once the burning is complete, produced wood ash and biochar would be scattered onto the forest floor to turn back into the soil once cooled. Air curtain burners would be set up on existing roadways and/or landings that meet the qualifications for their use, which comprise level, previously disturbed areas that are devoid of vegetation. Multiple air curtain burners could be operated simultaneously as part of the proposed project. A burner requires a crew of two to three people per burner and operating multiple burners next to each other would not necessarily require additional people.

Goals for these treatments would be to:

- dispose of 80 percent of biomass generated by mechanical and manual treatments;
- use air curtain burning to dispose of biomass within 200 feet of where an air curtain burner can safely be operated (e.g., roads, landing); the air curtain burner would be used to optimize producing biochar but would likely have some ash as a byproduct as well;
- dispose of biomass through pile burning in areas deemed suitable by the League;
- ▶ broadcast burn to remove up to 75 percent of the duff and litter layers on the forest floor;
- create canopy openings deemed essential for ecosystem health;
- ▶ create the conditions necessary for fire dependent tree species, such as giant sequoia, to germinate; and
- ▶ restore a more natural fire regime that reflects land management practices that predate European colonization

Prescribed burning would require between 10 and 50 crew members, depending on size and site characteristics of the burn unit. Typically, each burn would last 1 day to 2 weeks. Equipment could include water trucks, fire engines, and chainsaws. All burning would occur in accordance with regulations regarding the use of prescribed burning. This would include the preparation and implementation of a smoke management plan per SPR AQ-2; a burn plan per SPR AQ-3; and safety procedures and, if deemed necessary, an IAP per SPR AQ-6.

### HERBICIDE APPLICATION

Herbicides would be used sparingly to control vegetation that threatens the native biodiversity and/or increases wildfire hazards. Post-wildfire invasive plant and noxious weed infestations may be treated to prevent their establishment. Consistent with the definitions applied in the CalVTP, invasive species are those plant species identified as invasive by the California Invasive Plant Council (Cal-IPC) or defined as noxious weeds under California law by the California Department of Food and Agriculture. The occasional use of herbicides to treat invasive plant species and to control regrowth of native brush species (e.g., whitethorn) may be implemented to promote native biodiversity.

The herbicide glyphosate, which is consistent with those considered for use in the CalVTP, may be applied. Only ground-level application would occur; no aerial spraying of herbicides would occur. The least impactful method would be used at any given site. Several herbicide application methods are available for use by on-the-ground personnel, including paint-on stems and using backpack hand-applicators. Treatment would involve removing invasive plant species (e.g., bull thistle, scotch broom, wooly mullein) and noxious weeds through herbicide application. Herbicide application would comply with the US Environmental Protection Agency label directions, as well as California Environmental Protection Agency and California Department of Pesticide Regulation label standards. All herbicide application would be performed by certified and licensed pesticide applicators in accordance with all local, state, and federal regulations.

# **BIOMASS DISPOSAL**

Biomass would be disposed of from treatment of all 530 acres of the project area. Approximately 80 percent of biomass would be disposed of through use of air curtain burning or pile burning, as described above under "Prescribed Burning." Where use of air curtain burning or pile burning is impractical, lop-and-scatter techniques (approximately 10 percent) or disposal (e.g., of chips) at an off-site facility (approximately 10 percent) would be used. If biochar is generated by air curtain burning, the biochar would be applied in a thin layer on the forest floor near where the air curtain burner is stationed. Lopped vegetation remaining in the treatment area may be scattered on the forest floor for use as habitat and ground cover.

Invasive plant and noxious weed biomass would be treated on-site to eliminate seeds and propagules or would be disposed of off-site at an appropriate waste collection facility to prevent reestablishment or spread of invasive plants and noxious weeds. Invasive plants and noxious weeds would not be chipped and spread, scattered, or mulched on-site.

# 2.2.3 Road Repair

Some existing unpaved roads were damaged during the 2020 Castle Fire and are no longer safely passable by vehicles. These roadways, which are identified on Figure 2-1, would require regrading before, during, and/or after treatment due to the impact of equipment utilizing those roadways and for maintaining them as fuel breaks (as described above). The roads identified for repair are the roads currently in the worst condition and would be the roads most heavily used for the duration of the project. Road repair activities would facilitate the transportation of equipment in and out of the areas and to create even surfaced areas on the roadbed suitable for operation of an air curtain burner. Maintaining these roads would also be required to facilitate evacuation and access during a wildfire and would serve as containment features for the implementation of prescribed fire treatments.

The project would implement two types of road repair, road resurfacing and minor road repair. Road resurfacing (i.e., grading, fill) of the road prism would occur along the two primary access roads to the project area. This resurfacing would include 0.04 mile (211 feet) of disturbance that would include grading to maintain a 12-foot width, pulling berms, importing gravel, and out sloping where feasible. Gravel would be used to fill in the roadbed and create an even surface suitable for sustained movement of equipment in and out of the project area. Minor road repair would occur intermittently along 5.7 miles and consist of re-shaping of existing rolling dips, filling minor rutted areas with gravel, and other minor repairs. Excavated material would be stored away from watercourses in stable, permanent spoil locations to reduce risk of future accelerated erosion and sediment delivery. Up to two workers would implement road repair using up to three vehicles (passenger vehicles and a dozer) over a period of approximately 5 weeks. The types of equipment used for the road repair activities would be similar to the types of equipment used by mechanical treatments, including wheeled tractors, skid steers, and excavators.

Although the CalVTP PEIR included fuel breaks as a treatment type to provide safe ingress and egress routes and strategic control points to allow firefighters to safely engage a wildfire, which included ground disturbance to remove vegetation, the CalVTP PEIR did not include grading or filling within previously disturbed road prisms as part of vegetation treatment. Road repair to facilitate access while maintaining its ancillary use as a fuel break is evaluated in this addendum to the PEIR because it would constitute a revision or change in the project, compared to the PEIR.

# 2.2.4 Road Decommissioning

Some roads and skid trails in the project area are left over from former logging operations. Roads deemed unnecessary to implement the proposed project, including future maintenance, and/or would not be useful as fuel breaks are proposed for decommissioning to prevent erosion and contribute to ecological restoration goals in the project area. Roads and skid trails proposed for decommissioning are not currently used and would be contained within the habitat improvement and fire resiliency treatment areas shown in Figure 2-1.

Decommissioning activities would include a combination of blocking of entranceways, revegetation, installing waterbars, removing fill, stabilizing drainageways, removing unstable road shoulders, and recontouring and restoring natural

slopes. The roads and skid trails proposed for decommissioning are approximately 100-150 feet long in total. No road decommissioning would occur on slopes greater than 50 percent. Implementation of road decommissioning activities would use heavy equipment similar to that used for mechanical vegetation treatments as described in the CalVTP PEIR, such as dozers and front-end loaders. Hand tools could be used to knock down berms.

The CalVTP PEIR did not evaluate decommissioning roads or skid trails as part of the CalVTP program; thus, road decommissioning is evaluated in this addendum to the PEIR because it would constitute a revision or change in the project, compared to the PEIR.

# 2.3 TREATMENT MAINTENANCE

Maintenance of the areas treated under the proposed project would follow the League's existing general land management maintenance schedule and would be based on real-time monitoring of site conditions. The frequency of maintenance treatments would be determined by environmental considerations, including the rate of regrowth and fire return interval of the vegetation communities present in the project area. Maintenance treatments would also involve the same vegetation treatment activities used in the original treatment. Treatment maintenance would also involve removing invasive plant species and weeds through herbicide application.

Prior to implementing a maintenance treatment, the League would verify that the expected site conditions as described in the PSA are present in the treatment area. As time passes, the continued relevance of the PSA would be considered in light of potentially changed conditions or circumstances. Where the SNC or other agencies using this PSA for CEQA compliance determine the PSA is no longer sufficiently relevant, the agency would determine whether a new PSA or other environmental analysis is warranted.

In addition to verifying that the PSA continues to provide relevant CEQA coverage for treatment maintenance, the PSA will be updated at the time a maintenance treatment is needed when more than 10 years have passed since the approval of the PSA or the latest PSA update. For example, the League may conduct a reconnaissance survey to verify conditions are substantially similar to those anticipated in the PSA. Updated information will be documented.

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# 3 ENVIRONMENTAL CHECKLIST

#### VEGETATION TREATMENT PROJECT INFORMATION

1.	Project Title:	Alder Creek Sequoia Resilience and Post-Fire Restoration Project Vegetation Treatment Project
2.	CalVTP I.D. Number:	2022-27
3.	Implementing Entity Name and Address:	Save the Redwoods League 111 Sutter Street, 11th Floor San Francisco, CA 94104
4.	Contact Person Information and Phone Number:	Timothy Borden 415.820.5879 TBorden@savetheredwoods.org
5.	CEQA Lead Agency Name and Address:	Sierra Nevada Conservancy (for project components seeking SNC funding) 11521 Blocker Drive, Suite 205 Auburn, CA 95603
6.	Contact Person Information and Phone Number:	Benjamin Barry (for project components seeking SNC funding) 760.223.5841
7.	Project Location:	Tulare County, California; 36.19164, -118.61846
8.	Total Area to Be Treated (acres)	Up to 530 acres

9. Description of Project: Treatments would involve mechanical and manual treatments, prescribed burning (air curtain burners/pile burning/broadcast burning), herbicide application, and road repair. See Section 2, above for additional details.

#### a. Initial Treatment

The proposed project consists of vegetation treatments within the League's Alder Creek property (property). The property is located immediately east of the community of Sequoia Crest, 3 miles north of Camp Nelson in Tulare County (refer to Figure 1-1). The CalVTP treatments would occur within the entire property, totaling 530 acres. The CalVTP treatment types that would be implemented would be ecological restoration and fuel break. Proposed treatment activities to implement the proposed project would be manual and mechanical treatments, prescribed burning, and targeted herbicide application. The proposed CalVTP treatments are shown in Figure 2-1 and are summarized in Table 2-1, above.

#### **Treatment Types**

Wildland-Urban Interface Fuel Reduction

🛛 Fuel Break

Ecological Restoration

#### **Treatment Activities**

Prescribed Burning (Broadcast), <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres

Prescribed Burning (Pile Burning), <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres

Mechanical Treatment, <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres

Manual Treatment, <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres

Prescribed Herbivory,acres
Herbicide Application,530 (276 seeking SNC funding; 245 other funding sources) acres
Fuel Type
Grass Fuel Type
🔀 Shrub Fuel Type
Tree Fuel Type
<ul> <li><u>Treatment Maintenance</u></li> <li>Refer to Section 2.3, "Treatment Maintenance," above.</li> </ul>
Treatment Types
Wildland-Urban Interface Fuel Reduction
Fuel Break
Ecological Restoration
Treatment Activities
Prescribed Burning (Broadcast), <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres
Prescribed Burning (Pile Burning), <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres
Mechanical Treatment, <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres
Manual Treatment, <u>530 (276 seeking SNC funding; 245 other funding sources)</u> acres
Prescribed Herbivory,acres
Herbicide Application,530 (276 seeking SNC funding; 245 other funding sources) acres
Fuel Type
Grass Fuel Type
Shrub Fuel Type
Tree Fuel Type

#### Use of the PSA for Treatment Maintenance

Refer to Section 2.3, "Treatment Maintenance," above.

#### 10. Regional Setting and Surrounding Land Uses:

The project area is entirely within the boundaries of the Alder Creek grove of giant sequoia, one of 76 sequoia groves in the world. It is surrounded almost entirely by the Giant Sequoia National Monument, administered by the Sequoia National Forest. The project area is adjacent to the community of Sequoia Crest, with about 55 homes. The project area also contains a human-made lake and water company infrastructure that is outside of the project area. The water is used to supply the community of Sequoia Crest.

#### 11. Other Public Agencies Whose Approval Is Required: (e.g., permits)

Construction General Permit would be obtained from the Central Valley Regional Water Quality Control Board for mechanical vegetation treatments, road repair, and road decommissioning.

Pesticide application permit would be obtained from the Tulare County Agricultural Commissioner.

Permits for pile burning and broadcast burning would be obtained from San Joaquin Valley Air Pollution Control District, as required.

	Coastal Act Compliance					
	The proposed project is NOT within the Coastal Zone.					
	The proposed project is within the Coastal Zone. (Check one of the following boxes.)					
		A coastal development permit has been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable.				
		The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required.				
12.	Native Ame Resources ( requiremen	erican Consultation. The Board of Forestry and Fire Protection completed consultation pursuant to Public Code Section 21080.3.1 during preparation of the PEIR; however, CalVTP SPR CUL-2 includes for a It for further tribal coordination during PSA preparation.				
Pui No Chi	rsuant to SPI vember 21, 2 airperson, Bi	R CUL-2, Native American contacts in Tulare County were contacted on March 23, 2022 and 2022, and included Robert Gomez Jr., Chairman, Tubatulabals of Kern Valley; Elizabeth Kipp, g Sandy Rancheria of Western Mono Indians; Robert Robinson, Chairperson, Kern Valley Indian				

Cl Community; Julie Turner, Secretary, Kern Valley Indian Community; Brandy Kendricks, Kern Valley Indian Community; Neil Peyron, Chairperson, Tule River Indian Tribe; Kerri Vera, Environmental Department, Tule River Indian Tribe; Joey Garfield, Tribal Archaeologist, Tule River Indian Tribe; and Kenneth Woodrow, Chairperson, Wuksache Indian Tribe/Eshom Valley Band. No responses were received from any Native American tribes.

**Environmental Checklist** 

#### DETERMINATION

On <sup>.</sup>	On the basis of this PSA and the substantial evidence supporting it:						
	The SNC Governing Board finds 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, <b>WITHIN THE SCOPE</b> of the CalVTP PEIR. <b>NO ADDITIONAL CEQA DOCUMENTATION</b> is required.						
The	SNC Governing Board finds that:						
$\square$	The proposed project revisions will not result in substantial changes in the project, no substantial changes in circumstances have occurred, and no new information of substantial importance has been identified.						
$\boxtimes$	The proposed project revisions will not result in any new or substantially more severe significant impacts.						
	Therefore, none of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred. Accordingly, an <b>ADDENDUM</b> is adopted to address the proposed project revisions presented in the PEIR.						
	The SNC Governing Board finds 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 <b>NEGATIVE DECLARATION</b> will be prepared.						
	The SNC Governing Board finds 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 partners that would avoid or reduce the effects so that clearly no significant effects would occur. A <b>MITIGATED NEGATIVE DECLARATION</b> will be prepared.						
	The SNC Governing Board finds 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 <b>ENVIRONMENTAL IMPACT REPORT</b> will be prepared.						
	DocuSigned by:						
	March 2, 2023						

Signature

Angela Avery

Printed Name

Executive Officer

Date

Title

Sierra Nevada Conservancy

Agency

# 4 PROJECT-SPECIFIC ANALYSIS/ADDENDUM

# 4.1 AESTHETICS AND VISUAL RESOURCES

Impact in	Project-Specific Checklist							
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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:	<u></u>		<u>P</u>	L	1	<u>-</u>		
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	AD-4 AES-2 AQ-2 AQ-3 REC-1	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 Wildland-Urban Interface Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25	Yes	AES-1 AES-3	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 Nonshaded Fuel Break Treatment Type	SU	Impact AES-3, pp. 3.2-25 – 3.2-27	Yes	NA	AES-3	SU	No	Yes
Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact								
New Aesthetic and Visual Resou other impacts to aesthetics and the CalVTP PEIR?	urce Impacts: visual resource	Would the treat ces that are not	ment result ir evaluated in	Yes		No No	If yes, com below and	olete row(s) discussion
				Potential Significar	ly Less Th nt Mitiga	an Significant v tion Incorporat	with Less than ted	Significant
Completion of this row is not ap	oplicable beca	use there would	be no new					

impacts.

# Discussion

### **IMPACT AES-1**

Initial and maintenance treatments would include prescribed burning, mechanical treatment, manual treatment, and targeted ground application of herbicides. The nearest eligible state scenic highway to the project area, I-90, is over 2 miles south of the project area; the project area is not visible from this highway. The proposed treatments would occur on private lands owned by the League. Public viewpoints within and near the project area from which treatments could potentially be visible include the surrounding Giant Sequoia National Monument, which offers camping, hiking, fishing, wildlife viewing, and biking, the Stagg Tree and associated trail, and Poppy Lake located within the project area. The 2020 Castle Fire burned much of the project area and surrounding open space and likely degraded scenic viewpoints in the area except the area surrounding the Stagg Tree. The potential for these treatment activities to result in short-term degradation of the visual character of a treatment area was examined in the PEIR. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Although portions of the project area are visible from public viewpoints, the project area is densely vegetated with mature trees and has varied topography that is generally at higher elevations relative to most of the neighborhood and roads to the west, which would substantially reduce the visibility of treatments from those public viewpoints. The project area is generally at a lower elevation than portions of the Sequoia National Forest to the north and east and portions of the project may be visible from the Jordan Peak lookout (a local hiking destination) located approximately 1 mile northeast of the project area. Because of the extent that the forest burned in the burned area restoration and recovery portion of the project area (see Figure 2-1), the presence of large mechanical equipment may be visible from Jordan Peak. However, the quality of this view is already degraded because of the 2020 Castle Fire. Because of the forested coverage of the rest of the project area, visibility of mechanical equipment in those areas would likely be very limited if looking from Jordan Peak. The treatment and its visibility would be temporary and would not substantially degrade the existing visual character or quality of an area given that the activity would be limited in geographic extent. Thus, short-term changes to the quality of scenic views from Jordan Peak would not be substantial. In addition, treatments would primarily remove shrubs and smaller trees, leaving a portion of the overstory vegetation. Although in the short-term after treatment, the absence of treated vegetation could be noticeable, mature vegetation would remain to provide partial screening of treatment areas. However, equipment, crews, and smoke from prescribed burning could be visible from public viewpoints in the short term.

The potential for the project to result in short-term substantial degradation of the visual character of the project area is within the scope of the PEIR because the proposed treatment activities are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing scenic resources are essentially the same within and outside of the treatable landscape; therefore, the short-term aesthetic impact would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would constitute a change to the project analyzed in the PEIR. Burn plans prepared by the League would include smoke management plans that would meet the same standards as required for CAL FIRE burn plans. For this reason, proposed revisions to SPR AQ-3 would not result in increased smoke emissions or smoke-related impacts. Therefore, revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more significant effect on aesthetics and visual resources than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the project analyzed in the PEIR. However, the effects of road decommissioning on scenic resources are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used and visible during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to the proposed treatments are AD-4, AES-2, AQ-2, AQ-3, and REC-1. This determination

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

# IMPACT AES-2

Initial and maintenance treatments would include ecological restoration and shaded fuel break treatment types. The potential for these treatment types to result in long-term degradation of the visual character of an area was examined in the PEIR. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The nearest eligible state scenic highway to the project area, I-90, is over 2 miles south of the project area and the project area is not visible from this highway. Public viewpoints of the project area include public trails and recreation areas (i.e., Stagg Tree recreation area/trail, Giant Sequoia National Monument, Jordan Peak). Treatments would primarily remove shrubs and smaller trees, leaving a portion of the overstory vegetation. Therefore, mature vegetation would remain to provide partial screening of treatment areas. The long-term visual character of the treatment areas after implementation of the proposed ecological restoration and shaded fuel break treatments would remain consistent with the current natural, vegetated landscape and would not constitute a noticeable adverse change or degrade the currently visual character of the landscape.

The potential for the project to result in long-term substantial degradation of the visual character of the project area is within the scope of the PEIR because the proposed treatment activities are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing visual character is essentially the same within and outside of the treatable landscape; therefore, the long-term aesthetic impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning on existing visual character are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used and visible during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to the proposed treatments are AES-1 and AES-3. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT AES-3

Initial and maintenance treatments would include non-shaded fuel break treatments in areas that contain only shrubs with no tree canopy. Areas containing only shrub (i.e., shrub/scrub habitat) are limited in the project area (i.e., approximately 21.8 acres of the total 530 acres; Table 4.5-1). Public viewpoints of the project area include public trails and recreation areas (i.e., Stagg Tree recreation area/trail, Giant Sequoia National Monument, Jordan Peak). The potential for this treatment type to result in long-term degradation of the visual character of an area was examined in the PEIR and found to be significant and unavoidable after the application of all feasible mitigation measures because it may be infeasible to relocate a non-shaded fuel break to avoid public visibility. However, because the project area includes trails that are open to the public, non-shaded fuel breaks could be visible from public viewpoints.

The potential for the project to result in substantial long-term degradation of the visual character of the project area is within the scope of the PEIR because the proposed treatment activities are consistent with those analyzed in the PEIR. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing visual character is essentially the same within and outside of the treatable landscape; therefore, the long-term aesthetic impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning on existing visual character are essentially the same as the effects of mechanical treatment

activities as analyzed in the PEIR because the same types of equipment would be used and visible during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). No SPRs are applicable to this impact; however, Mitigation Measure AES-3 would apply to this treatment to minimize visual impacts, if feasible, from any heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of non-shaded fuel breaks. While implementation of Mitigation Measure AES-3 would substantially reduce the potential for substantial long-term degradation of visual character, as noted in the PEIR, the amount of the reduction would be uncertain; therefore, the potential remains for substantial long-term degradation of visual character. For purposes of CEQA compliance, this impact would also be considered significant and unavoidable. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

# NEW AESTHETIC AND VISUAL RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The sitespecific characteristics of the proposed treatments 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions pertinent to aesthetics and visual resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The changes to SPR AQ-3 constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS). The USFS burn plan template requires the same standards for air quality as the CAL FIRE template; therefore, SPR AQ-3 as revised would be equally protective as this SPR as presented in the PEIR. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to aesthetics and visual resources are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, revision of SPR AQ-3, and the inclusion of road decommissioning would not give rise to any new significant impact. Therefore, no new impact related to aesthetics and visual resources would occur.

# 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	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the PEIR?	ls This Impact within the Scope of the PEIR?
Would the project:			•	<u>.</u>	<u>.</u>	<u>.</u>		
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
Notes: LTS = less than significant	;; NA = not ap	plicable because	e there are no	SPRs and/or N	/Ms identifie	ed in the PEIR f	or this impact.	
<b>New Agriculture and Forestry Resource Impacts:</b> Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?			ed Yes		If yes, com No below and		olete row(s) discussion	
			Potentiall Significar	y Less Th nt Mitiga	Less Than Significant with Le Mitigation Incorporated		Significant	
Completion of this row is not applicable because there would be no new impacts.								

# Discussion

# IMPACT AG-1

Vegetation treatment activities implemented within the project area would include manual, mechanical, prescribed burning, and herbicide treatments to conduct ecological restoration and fuel break treatment types. The creation of shaded fuel breaks would involve the thinning of the tree canopies in forested areas by removing live conifer trees up to 30 inches dbh and live hardwoods up to 20 inches dbh. In areas where there are only small diameter trees present, spaces of 24 feet would be created between trees.

The potential for these treatment types and treatment activities to result in the loss of forestland or conversion of forestland to non-forest use was examined in the PEIR. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The treatment activities described above would occur in forested lands. Consistent with the PEIR, the vegetation remaining after treatments would meet the definition of forestland as defined in PRC Section 12220(g), which defines "forest land" as land that can support 10 percent native tree cover of any species under natural conditions. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the composition of forested land as defined in PRC Section 12220(g) is essentially the same within and outside the treatable landscape; therefore, the impact to forest land is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion

would constitute a change to the PEIR. However, the effects of road decommissioning on agriculture and forestry resources are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and would not include removal of trees. No SPRs are applicable to this impact. Therefore, the potential for the 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.

## NEW AGRICULTURE AND FORESTRY RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatment project 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the effects of road decommissioning pertinent to agriculture and forestry resources are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and the inclusion of road decommissioning would not 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	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significance for Treatment Project	Would This Be a Substantially More Severe Significant Impact than Identified in the PEIR?	ls 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	Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1	Yes	AD-4 AQ-1 through AQ-6	AQ-1	SU	No	Yes
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	Impact AQ-2, pp. 3.4-33 – 3.4-34; Appendix AQ-1	Yes	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	Impact AQ-3, pp. 3.4-34 – 3.4-35	Yes	AQ-5	NA	LTS	No	Yes
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	SU	Impact AQ-4, pp. 3.4-35 – 3.4-37	Yes	AQ-2 AQ-3 AQ-4 AQ-6	NA (No feasible mitigation available)	SU	No	Yes
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	Impact AQ-6; pp. 3.4-38	Yes	AD-4 AQ-2 AQ-3 AQ-6	NA (No feasible mitigation available)	SU	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Air Quality Impacts:</b> Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

# Discussion

The project area is within the San Joaquin Valley Air Basin, which is under the authority of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Pursuant to SPR AQ-2, the League will prepare a smoke management plan and submit it to SJVAPCD prior to implementing prescribed burning treatments when required. The smoke management plan will include fire behavior modeling and will be implemented by a state-certified burn boss. An IAP, which identifies burn organization and assignments, prescribed fire objectives and prescription, description of the prescribed fire area, expected weather and fire behavior, communications, ignition plan, holding plan, contingency plan and assignments, wildfire declaration, and safety and medical plans required by SPR AQ-6, will also be prepared by the League for prescribed burning treatments, as necessary. The IAP will also identify the contact personnel with SJVAPCD to coordinate on-site briefings, posting notifications, and weather monitoring during burning.

# IMPACT AQ-1

Use of vehicles, mechanical equipment, and prescribed (broadcast) burning, and prescribed (pile) burning and the use of air curtain burning to process biomass, during initial and maintenance treatments would result in emissions of criteria pollutants that could exceed California ambient air quality standard (CAAQS) or national ambient air quality standard (NAAQS) thresholds. The potential for emissions of criteria pollutants to exceed CAAQS or NAAQS thresholds was examined in the PEIR. Emissions of criteria air pollutants related to the proposed treatment are within the scope of the PEIR because the associated equipment and duration of use are consistent with those analyzed in the PEIR. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The SPRs applicable to this treatment project are AD-4 and AQ-1 through AQ-6. The League would implement the emission reduction techniques included in Mitigation Measure AQ-1 to the extent feasible. However, because the treatments would be implemented by a non-governmental organization with limited funding, procuring or paying additional for contractors that use equipment meeting the latest efficiency standards, including meeting the US EPA's Tier 4 emission standards, using renewable diesel fuel, using electric- and gasolinepowered equipment, and using equipment with Best Available Control Technology may be cost prohibitive. Carpooling would be encouraged by the League, but because crews may not all be employed with the same company and due to the project's location in a rural area it may not be feasible for most workers.

The League is proposing use of air curtain burners to process biomass in place of pile burning, pursuant to Mitigation Measure GHG-2. Evaluation of criteria air pollutant emissions from these biomass processing technologies conducted by Ascent (2022) indicates that smoke and criteria air pollutant emissions can be substantially reduced, compared to open pile burning. Use of an air curtain burner substantially reduces ROG and PM emissions by approximately 96 percent when compared to pile burning. For NO<sub>X</sub>, air curtains are estimated to reduce NO<sub>X</sub> emissions by at least 73 percent (Ascent 2022). Based on available information about emissions from biomass processing technologies, these technologies offer the opportunity to substantially reduce local exposure to PM from smoke, a potentially beneficial difference compared to pile burning. Despite the substantial reduction in criteria air pollutant emissions afforded by use of these biomass processing technologies, impact AQ-1 must still be recognized as potentially significant and unavoidable because of uncertainties in the extent of their use.

The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions present and air basin in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would constitute a change to the project analyzed in the PEIR. Burn plans prepared by the League would include smoke management plans that would meet the same standards as required for CAL FIRE burn plans. For these reasons, proposed revisions to SPR AQ-3 would not result in greater generation of emissions of criteria air pollutants and precursors, and
revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect on air quality than what was covered in the PEIR.

The League also proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that the League would conduct a safety briefing with all personnel resources on site for each operational period for all prescribed burning treatments to ensure personnel safety considerations and prescribed fire objectives, and IAPs and associated maps would be prepared if deemed necessary by a burn boss or qualified technician. This would constitute a change to the project analyzed in the PEIR. The proposed revisions to SPR AQ-6 would not result in greater generation of emissions of criteria air pollutants and precursors, and revisions to SPR AQ-6, specifically for prescribed burning treatment activities, would not result in a substantially more significant effect on air quality than what was covered in the PEIR because similar safety procedures that would minimize exposure of the public to smoke from prescribed burn activities.

The effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT AQ-2

Use of mechanical equipment during initial and maintenance treatments could expose people, such as hikers and recreationists by Camp Nelson, to diesel particulate matter emissions. However, treatment activities would not take place near the same people for an extended period. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential to expose people to diesel particulate matter emissions was examined in the PEIR. Diesel particulate matter emissions from the proposed treatments are within the scope of the PEIR because the exposure potential is the same as analyzed in the PEIR, and the types and amount of equipment that would be used, as well as the duration of use, during proposed treatments are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions and sensitive receptors (i.e., exposure potential) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the project analyzed in the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to this treatment are HAZ-1, NOI-4, and NOI-5. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PFIR.

## IMPACT AQ-3

Use of vehicles, mechanical equipment, and prescribed burning during treatments would involve ground disturbing activities. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) that would be used during ground-disturbing activities. The potential to expose people to naturally occurring asbestos (NOA)-containing fugitive dust emissions was examined in the PEIR. According to a United States Geological Soil Survey map of areas where naturally occurring asbestos in California are likely to occur, the project area is not located on soil types where NOA would be present (USGS 2011). However, portions of the project area are underlain by serpentine soils (see Section 4.6, "Geology, Soils, Paleontology, and Mineral Resources"). In accordance with SPR AQ-5, no treatments would occur in these areas unless an Asbestos Dust Control Plan (if required by 17 CCR Section 93105) is prepared and approved by SJVAPCD. Potential NOA exposure from the

proposed treatments is within the scope of the activities and impacts addressed in the PEIR because the avoidance of treatments in NOA-containing areas is consistent with the impacts analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used and would result in similar ground disturbance. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT AQ-4

Prescribed burning during initial and maintenance treatments could expose people to toxic air contaminants, which was examined in the PEIR. The duration and parameters of the prescribed burns are within the scope of the activities addressed in the PEIR, and within the SJVAPCD, air quality conditions are consistent with those analyzed in the PEIR for Tulare County. The use of air curtain burners is proposed to reduce smoke emissions and associated toxic air contaminants in comparison to pile burning. Toxic air contaminants (TAC) resulting from the combustion of biomass are generally organic in nature and are, therefore, a subset of reactive organic gas (ROG) emissions. Based on evaluation conducted by Ascent (2022), the proposed use of air curtain burners would reduce ROG emissions by at least 96 percent when compared to pile burning of equivalent areas. Therefore, the exposure of persons to TACs and related health risks would likely be substantially lower with the use of air curtain burners as compared with pile burning.

The duration and parameters of the prescribed burns are within the scope of the activities addressed in the PEIR, and impacts would be reduced with the use of advanced biomass processing technologies. Within the SJVAPCD, air quality conditions are consistent with those analyzed in the PEIR for Tulare County. Therefore, the potential for exposure to toxic air contaminants is also within the scope the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions present and air basin in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would constitute a change to the project analyzed in the PEIR. Burn plans prepared by the League would include smoke management plans that would meet the same standards as required for CAL FIRE burn plans. For this reason, proposed revisions to SPR AQ-3 would not result in greater generation of toxic air contaminants, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect on air quality than what was covered in the PEIR.

The League also proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that the League would conduct a safety briefing with all personnel resources on site for each operational period for all prescribed burning treatments to ensure personnel safety considerations and prescribed fire objectives, and IAPs and associated maps would be prepared if deemed necessary by a burn boss or qualified technician. This would constitute a change to the project analyzed in the PEIR. The proposed revisions to SPR AQ-6 would not result in greater exposure of people to toxic air contaminants because SPR AQ-6 would continue to require implementation of safety procedures that would minimize exposure of the public to smoke from prescribed burn activities. Thus, the proposed revisions to SPR AQ-6 would not result in a substantially more severe significant effect on air quality than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities included in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and would not include any additional prescribed burning; thus, road decommissioning would not result in any impacts related to exposure of people to TACs and related health risks. SPRs applicable to these treatment activities are AD-4, AQ-2, AQ-3, and AQ-6.

All feasible measures to prevent and minimize smoke emissions, as well as exposure to smoke, are included in SPRs. No additional mitigation measures are feasible, and this impact would remain significant and unavoidable, as explained in the PEIR. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT AQ-5

Use of diesel-powered equipment during vegetation treatments could expose people to objectionable odors from diesel exhaust. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) that would be used during ground-disturbing activities. The potential to expose people to objectionable odors from diesel exhaust was examined in the PEIR. 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. This impact is within the scope of the PEIR because the equipment that would be used and the duration of use under the proposed project are consistent with what was analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions are essentially the same within and outside of the treatable landscape; therefore, the long-term air quality impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). 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

Prescribed burning during initial and maintenance treatments could expose people to objectionable odors. The potential to expose people to objectionable odors from prescribed burning was examined in the PEIR. The use of air curtain burners is proposed to reduce smoke emissions and associated odors in comparison to pile burning. When compared to pile burning, air curtain burners would substantially reduce smoke through filtering.

The duration and parameters of the prescribed burning and the exposure potential are consistent with the activities addressed in the PEIR, and impacts would be reduced with the use of air curtain burners. Therefore, the resultant potential for exposure to objectionable odors from smoke is also within the scope of impacts covered in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the air quality conditions present and sensitive receptors in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the air quality impact would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would constitute a change to the project analyzed in the PEIR. Burn plans prepared by the League would include smoke management plans that would meet the same standards as required for CAL FIRE burn plans. For this reason, proposed revisions to SPR AQ-3 would not result in greater generation of objectionable odors from smoke, and revisions to SPR AQ-3,

Ascent

specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect on air quality than what was covered in the PEIR.

The League also proposes to revise requirements under SPR AQ-6 for prescribed burning activities such that the League would conduct a safety briefing with all personnel resources on site for each operational period for all prescribed burning treatments to ensure personnel safety considerations and prescribed fire objectives, and IAPs and associated maps would be prepared if deemed necessary by a burn boss one day prior to ignition. This would constitute a change to the project analyzed in the PEIR. The proposed revisions to SPR AQ-6 would not result in greater exposure of people to objectionable odors from smoke because SPR AQ-6 would continue to require implementation of safety procedures that would minimize exposure of the public to smoke from prescribed burn activities. Thus, the proposed revisions to SPR AQ-6 would not result in greater generation of objectionable odors from smoke, and revisions to SPR AQ-6, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect on air quality than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities included in the PEIR and would not include any additional prescribed burning; thus, road decommissioning would not result in a substantially more severe significant impact related to exposure of people to objectionable odors than what was covered in the PEIR. SPRs that are applicable to this treatment project are AD-4, AQ-2, AQ-3, and AQ-6.

All feasible measures to prevent and minimize smoke odors, as well as exposure to smoke odors, are included in SPRs. No additional mitigation measures are feasible, and this impact would remain significant and unavoidable, as explained in the PEIR. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## NEW AIR QUALITY IMPACTS

The proposed treatments are consistent with the treatment types and activities covered in the CalVTP PEIR. The sitespecific characteristics of the proposed treatments are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.4.1, "Regulatory Setting," and Section 3.4.2, "Environmental Setting," in Volume II of the Final PEIR). Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to air quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Revisions to SPRs AQ-3 and AQ-6 would constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), while revisions to AQ-6 would continue to require implementation of safety procedures that would minimize exposure of the public to smoke and, if deemed necessary by a burn boss or qualified technician, would require an IAP and associated maps to be prepared. The USFS burn plan template requires the same standards for air quality as the CAL FIRE template, and preparing IAPs only when deemed necessary by a burn boss or qualified technician rather than every time prescribed burning occurs would not result in a new impact that was not analyzed in the PEIR.

The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to air quality are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and the inclusion of road decommissioning would not give rise to any new significant impact. Therefore, no new impact related to air quality would occur.

# 4.4 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Impact i	Project-Specific Checklist							
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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-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-2 CUL-3 CUL-4 CUL-5 CUL-8	CUL-2	SU	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 CUL-4 CUL-5 CUL-6 CUL-8	NA	LTS	No	Yes
Impact CUL-4: Disturb Human Remains	LTS	Impact CUL-4, p. 3.5-18	Yes	NA	NA	LTS	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

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 No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

## Discussion

Consistent with SPR CUL-1, a records search of the approximately 530-acre project area was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) in February 2021, after the Castle Fire. The records search revealed one previously recorded precontact archaeological site (bedrock mortars). No historic-era archaeological sites or historic built-environment features were revealed.

Consistent with SPR CUL-2, an updated Native American contact list was obtained from the Native American Heritage Commission (NAHC). On March 23, 2022 and November 21, 2022, letters inviting the tribes to consult were sent to Robert Gomez Jr., Chairman, Tubatulabals of Kern Valley; Elizabeth Kipp, Chairperson, Big Sandy Rancheria of Western Mono Indians; Robert Robinson, Chairperson, Kern Valley Indian Community; Julie Turner, Secretary, Kern Valley Indian Community; Brandy Kendricks, Kern Valley Indian Community; Neil Peyron, Chairperson, Tule River Indian Tribe; Kerri Vera, Environmental Department, Tule River Indian Tribe; Joey Garfield, Tribal Archaeologist, Tule River Indian Tribe; and Kenneth Woodrow, Chairperson, Wuksache Indian Tribe/Eshom Valley Band. No responses were received from any Native American tribes as of December 27, 2022. An April 29, 2022 search of NAHC's sacred lands database returned positive results.

## IMPACT CUL-1

Proposed treatment activities include mechanical treatments and prescribed burning, which could damage historical resources. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The SSJVIC records search did not revealed any historic built-environment features; nevertheless, structures (i.e., buildings, bridges, roadways) over 50 years old that have not been recorded or evaluated for historical significance may be present in the project area. These structures will be identified and avoided pursuant to SPR CUL-7. The potential for these treatment activities to result in disturbance, damage, or destruction of built-environment structures that have not yet been evaluated for historical significance was examined in the PEIR. This impact is within the scope of the PEIR, because treatment activities and the intensity of ground disturbance of the treatment project are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential to encounter built-environment structures that have not yet been evaluated for historical significance in areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to historical resources is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to this impact are CUL-1, CUL-7, and CUL-8. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT CUL-2

The proposed project would include mechanical treatments using heavy equipment that could churn up the surface of the ground; these activities may result in damage to known or previously unknown archaeological resources. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The SSJVIC records search revealed one precontact archaeological site; however, this has not been evaluated for eligibility for listing in the CRHR. Therefore, it is not known whether this site is considered a resource under CEQA. A survey of 92 acres of the project area was conducted in May 2021; a survey of the remainder of the project area will be conducted before treatment pursuant to SPR CUL-4 to identify any previously unrecorded archeological resources. Identified resources will be avoided according to the provisions of SPR CUL-5.

The potential for these treatment activities to result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources during vegetation treatment was examined in the PEIR. This impact was identified as significant and unavoidable in the PEIR because of the large geographic extent of the treatable landscape and the possibility that there could be some rare instances where inadvertent damage of unknown resources may be extensive. For the Alder Creek Sequoia Resilience and Post-Fire Restoration Project, SPRs and Mitigation Measure CUL-2 would require identification and protection of resources, and it is reasonably expected that implementation of these measures would avoid a substantial adverse change in the significance of any unique archaeological resources or subsurface historical resources. However, because the project could result in inadvertent discovery and subsequent damage of unique archaeological resources or subsurface historical resources.

contribute to the environmental significance conclusion in the PEIR; therefore, for purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable, as explained in the PEIR.

This impact is within the scope of the PEIR, because treatment activities and intensity of ground disturbance of the treatment project are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential for discovery of archaeological resources is essentially the same within and outside the treatable landscape; therefore, the potential impact to unique archaeological resources or subsurface historical resources is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to this treatment include CUL-1 through CUL-5 and CUL-8. Mitigation Measure CUL-2 would also apply to this treatment to protect any inadvertent discovery. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT CUL-3

Native American contacts in Tulare County were contacted on March 23, 2022 and November 21, 2022, and included Robert Gomez Jr., Chairman, Tubatulabals of Kern Valley; Elizabeth Kipp, Chairperson, Big Sandy Rancheria of Western Mono Indians; Robert Robinson, Chairperson, Kern Valley Indian Community; Julie Turner, Secretary, Kern Valley Indian Community; Brandy Kendricks, Kern Valley Indian Community; Neil Peyron, Chairperson, Tule River Indian Tribe; Kerri Vera, Environmental Department, Tule River Indian Tribe; Joey Garfield, Tribal Archaeologist, Tule River Indian Tribe; and Kenneth Woodrow, Chairperson, Wuksache Indian Tribe/Eshom Valley Band. No responses were received from any Native American tribes as of December 27, 2022.

The potential for the proposed treatment activities to cause a substantial adverse change in the significance of a tribal cultural resource during implementation of vegetation treatment was examined in the PEIR. This impact is within the scope of the PEIR, because the intensity of ground disturbance of the treatment project is consistent with that analyzed in the PEIR. As explained in the PEIR, while tribal cultural resources may be identified within the treatable landscape during development of later treatment projects, implementation of SPRs would avoid any substantial adverse change to any tribal cultural resource. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the tribal cultural affiliations present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact to tribal cultural resources is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to this treatment include CUL-1 through CUL-6 and CUL-8. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT CUL-4

Vegetation treatment activities would include mechanical treatments using heavy equipment. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Project activities involving the use of skid steers, excavators, and dozers, which could uncover human remains. The SSJVIC records search did not reveal any burials or sites containing human remains. The potential for treatment activities to uncover human remains was examined in the PEIR. This impact is within the scope of the PEIR, because the treatment activities and intensity of ground disturbance are consistent with those analyzed in

the PEIR. Additionally, consistent with the PEIR, the project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097 in the event of a discovery. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential for uncovering human remains during implementation of the treatment project is essentially the same within and outside the treatable landscape and treatment activities; therefore, the impact related to disturbance of human remains is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## NEW ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCE IMPACTS

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The sitespecific characteristics of the proposed treatment project 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to archaeological, historical, or tribal cultural resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to archaeological, historical, or tribal cultural resources are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and the inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to archaeological, historical, or tribal cultural resources would occur.

# 4.5 BIOLOGICAL RESOURCES

Impact i	Project-Specific Checklist							
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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-7 BIO-9 AQ-3 AQ-4 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 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) SU (bumble bees)	Impact BIO- 2, pp 3.6-138 – 3.6-184	Yes	BIO-1 BIO-2 BIO-3 BIO-4 BIO-5 BIO-10 GEO-1 HYD-4	BIO-2a BIO-2b BIO-2c	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-4 BIO-5 BIO-6 BIO-9 GEO-1 GEO-3 GEO-4 GEO-5 GEO-7 HAZ-5 HAZ-5 HAZ-6 HYD-4 HYD-5	BIO-3a BIO-3b BIO-3c	LTSM	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 BIO-3 BIO-9 GEO-1 GEO-3 GEO-4	BIO-4	LTSM	No	Yes

Sierra Nevada Conservancy and Save the Redwoods League

Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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?
				GEO-5 GEO-6 GEO-7 HAZ-5 HAZ-6 HYD-1 HYD-4 HYD-5				
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 BIO-2 BIO-3 BIO-4 BIO-5 HYD-4	BIO-5	LTSM	No	Yes
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO- 6, pp 3.6-197 – 3.6-198	Yes	BIO-1 BIO-2 BIO-3 BIO-4 BIO-5 BIO-12	NA	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	_		_	_	

Notes: LTS = less than significant; LTSM = less than significant with mitigation; NI = no impact; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Biological Resources Impacts:</b> Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

# Discussion

Pursuant to SPR BIO-1, Ascent biologists conducted a data review of project-specific biological resources, including habitat and vegetation types, and special-status plants, special-status wildlife, and sensitive habitats (e.g., sensitive natural communities, wetlands) with potential to occur in the project area. The USFS Existing Vegetation (EVEG) mapping prior to the 2020 Castle Fire was used to identify the habitat/vegetation types within the project area (Table 4.5-1).

Habitat Type	Fuel Break Acreage	Ecological Restoration (Burned Area Restoration and Recovery) Acreage	Ecological Restoration (Habitat Improvement/Fire Resiliency) Acreage	Total Acreage
Forest/Woodland				
Sierran Mixed Conifer	8.7	205.1	245.9	459.7
Red Fir Forest	0.0	5.3	16.4	21.6
Montane Hardwood	0.4	17.3	7.4	25.0
Forest/Woodland Total	-	-	-	506.3
Shrub/Scrub			-	
Montane Chaparral	0.4	15.9	5.6	21.8
Shrub/Scrub Total	-	-	-	21.8
Wetland/Riparian				
Lacustrine	0.0	1.2	0.0	1.2
Wetland/Riparian Total	-	-	-	1.2
Developed/Disturbed/Barren <sup>1</sup>				
Barren	0.0	0.0	0.6	0.6
Developed/Disturbed/Barren Total	_	_	_	0.6
All Habitat Types Total	_	_	_	530.0

#### Table 4.5-1 Habitat Types in the Project Area

Most urban and barren habitats would not be targeted for treatment; however, due to the scale of the habitat mapping, some areas mapped as urban or barren may contain habitats that would be treated (e.g., forested areas close to urban development).

Source: USFS EVEG vegetation data, compiled by Ascent Environmental in 2022.

Ascent conducted a reconnaissance-level survey of the treatment area pursuant to SPR BIO-1 on July 7, 2022. During this reconnaissance-level survey, fire effects from the 2020 Castle Fire were observed. Burn severity ranged from unburned/very low to high in the project area (League 2021). Sierran mixed conifer vegetation community (459.7 acres), which is the dominant vegetation type in the project area, experienced a mix of burn severities (League 2021). Although some portions of the giant sequoia (Sequoiadendron giganteum) grove experienced high-severity fire, the fire severity in most of the grove was low to very low. Giant sequoia regeneration was observed in the northern portion of the project area in areas that experienced low- and moderate/high-severity fire. Herbaceous plants, conifer seedlings, and chaparral species, through seed regeneration and stump sprouting, were observed recolonizing areas that experienced high-severity fire, although overall density of these species was very low. Over half of the red fir vegetation community (21.6 acres) in the project area burned at low severity and about 20 percent burned at high severity. In the red fir areas that experienced moderate- and low-severity fire, a large portion of the younger conifer trees observed during SPR BIO-1 had died in the fire but most of the larger conifer trees (greater than approximately 36 inches dbh) had survived. Some patches had large amounts of herbaceous and shrub cover growing in the understory while other areas had sparser understory cover. Over half of the montane hardwood vegetation community (25.0 acres) burned at high severity. California black oak (Quercus kelloggii) were observed resprouting and regenerating from seed in the burn area. Over 60 percent of the montane chapparal vegetation community (21.8 acres) in the project area experienced high-severity burn.

Portions of the sierran mixed conifer and montane chaparral vegetation community killed by high-severity fire were removed in the southern portion of the project area during post-fire maintenance and were lacking cover. About half the montane chaparral vegetation community mapped in the project area was in this area. Herbaceous and chaparral species would most likely begin regenerating in this area, but it will take time to reestablish tree canopy cover in the areas mapped as Sierran mixed conifer and mature chaparral individuals in the montane chapparal. There was

herbaceous and riparian species regeneration occurring around the pond in the southern section of the project area and high amounts of herbaceous cover in the freshwater emergent wetland north of the pond in July 2022.

The project area is in the Sierra Nevada ecoregion. The project area ranges in elevation from approximately 5,800 feet to 7,470 feet. Habitat types within the project area and total acreage of each type are presented in Table 4.5-1.

A list of special-status plant and wildlife species with potential to occur in the project area was compiled by completing a review of the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database records for the US Geological Survey (USGS) quadrangles containing and surrounding the project area (9 quadrangles total; CNDDB 2022; CNPS 2022); the US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool (USFWS 2022); and Appendix BIO-3 (Table 13a, Table 13b, and Table 19) in the PEIR (Volume II) for special-status plants and wildlife that could occur in the Sierra Nevada ecoregion. A list of sensitive natural communities with potential to occur in the project area (CNDDB 2022a) and reviewing Table 3.6-22 (pages 3.6-83 – 3.6-85) in the PEIR (Volume II) for sensitive natural communities that could occur in the Sierra Nevada ecoregion in the Appendix area (CNDDB 2022a) and reviewing Table 3.6-22 (pages 3.6-83 – 3.6-85) in the PEIR (Volume II) for sensitive natural communities that could occur in the Sierra Nevada ecoregion in the habitat types mapped in the project area.

During the reconnaissance survey on July 7, 2022, Ascent identified and documented sensitive resources (e.g., aquatic habitat, riparian habitat, sensitive natural communities) and assessed the suitability of habitat in the project area for special-status plant and wildlife species. Mapped habitat types were verified where possible and incidental wildlife observations were recorded. Parts of the montane chaparral in the project area mapped by EVEG were determined to be Sierran mixed conifer during SPR BIO-1. Mapping and acreages were updated accordingly (Table 4.5-1).

Based on implementation of SPR BIO-1, including review of occurrence data, species ranges, habitat requirements for each species, results of reconnaissance-level surveys, and habitat present within the project area as assessed during reconnaissance surveys, a complete list of all species with potential to occur in the vicinity of the proposed project was assembled (Attachment B). Twenty-six of the special-status plants and five of the special-status wildlife from the complete list of species are known or potentially occur in the project area (Table 4.5-2). These species are discussed in detail under Impact BIO-1 (special-status plants) and Impact BIO-2 (special-status wildlife).

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Special-Status Plants					
Mountain bent grass Agrostis humilis	_	_	2B.3	Alpine boulder and rock field, meadows and seeps. Moist to dry meadow in subalpine coniferous forest. Sometimes on calcareous substrates. Probably undercollected; high elevation grass. 5,000–11,160 feet in elevation. Blooms July–September. Perennial.	<i>May occur</i> . Fresh emergent wetlands, including wet meadows, potentially suitable for this species are present in the project area.
Abrams' onion Allium abramsii	_	_	1B.2	Lower montane coniferous forest, upper montane coniferous forest. On sandy soils, derived from disintegrated granite. 3,200–10,010 feet in elevation. Blooms May–July. Geophyte.	<i>May occur</i> . Sierran mixed conifer forest habitat with sandy granitic soils potentially suitable for this species is present in the project area.
Mingan moonwort Botrychium minganense	_	-	2B.2	Meadows, open forest along streams or around seeps. 3,900– 10,810 feet in elevation. Blooms July–September. Geophyte.	<i>May occur</i> . Freshwater emergent wetland, wet meadows, and streams in Sierran mixed conifer habitat potentially suitable for this species is present in the project area.

Table 4.5-2	Special-Status Plant and Wildlife Species with Potential to Occur in the Project Area
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Sierra Nevada Conservancy and Save the Redwoods League Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Watershield Brasenia schreberi	_	_	2B.3	Aquatic from water bodies both natural and artificial in California. Ponds, slow streams. 90–7,220 feet in elevation. Blooms June– September. Geophyte.	<i>May occur</i> . Pond habitat potentially suitable for this species is present in the project area.
Shirley Meadows star- tulip <i>Calochortus westonii</i>		_	1B.2	Meadows, open woodlands; granite substrates. 4,970–6,810 feet in elevation. Blooms May–June. Geophyte.	<i>Known to occur</i> . <i>Calochortus westonii</i> was documented in the northeast portion of the project area, 0.7 mile west-northwest of the Stagg Tree during a rare plant survey on June 23, 2022 (League 2022). This species also has one documented occurrence from 2012 in the northern portion of the project area 0.5 mile west of the Stagg Tree and two documented occurrences from 2022 in the northern section of the project area 0.5 mile west-southwest and 0.8 mile west of the Stagg Tree (Calflora 2022). Sierran mixed conifer and montane hardwood habitat potentially suitable for this species is present elsewhere in the project area.
Flagella-like atractylocarpus Campylopodiella stenocarpa	_	_	2B.2	Cismontane woodland. All California populations are on roadsides. The ID of the California populations is under question, but thought to be a rare moss species in California. 330–8,530 feet in elevation. Perennial.	May occur. Sierran mixed conifer and montane hardwood forest habitat potentially suitable for this species is present in the project area. The project area is west of the Sierra Nevada crest. There is a documented occurrence from 1982 approximately 9 miles northeast of the project area (Calflora 2022).
Bolander's woodreed Cinna bolanderi	_	_	1B.2	Streambanks, wet meadows, moist sites in conifer forest. 3,980–7,290 feet in elevation. Blooms July– September. Perennial.	<i>May occur</i> . Streambank, wetland, and moist sites in conifer forest habitat potentially suitable for this species is present in the project area.
Tulare cryptantha incana	_	_	1B.3	Open conifer forest, occasionally chaparral. Granitic gravelly or rocky soils. 4,790–9,350 feet in elevation. Blooms June–August. Annual.	<i>May occur</i> . Sierran mixed conifer and chaparral habitat with gravelly and rocky soils potentially suitable for this species are present in the project area.
Jepson's dodder <i>Cuscuta jepsonii</i>	_	_	1B.2	Upper montane coniferous forest, lower montane coniferous forest, broadleaved upland forest. Primary host species are <i>Ceanothus</i> <i>diversifolius</i> and <i>Ceanothus</i> <i>prostratus</i> . 390–9,010 feet in elevation. Blooms July–September. Annual.	<i>May occur</i> . Sierran mixed conifer and montane hardwood habitat potentially suitable for this species is present in the project area. <i>Ceanothus diversifolius</i> , one of the primary host species of <i>Cuscuta</i> <i>jepsonii</i> , has potential to occur in the project area.

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Rose-flowered larkspur Delphinium purpusii	_	_	1B.3	Chaparral, cismontane woodland, pinyon-juniper woodland. On shady rocky slopes; often on carbonates. 980–7,000 feet in elevation. Blooms April–May. Perennial.	<i>May occur</i> . Chaparral, Sierran mixed conifer, and red fir habitat with carbonate derived rocks potentially suitable for this species is present in the project area.
Mineral King draba Draba cruciata	_	_	1B.3	Subalpine coniferous forest. On steep rocky slopes in gravelly soils. 8,210–11,110 feet in elevation. Blooms June–August. Perennial.	<i>May occur</i> . Sierran mixed conifer and red fir habitat with steep rocky slopes potentially suitable for this species is present in the project area.
Pierpoint Springs dudleya <i>Cymosa</i> ssp. <i>costatifolia</i>	_	_	1B.2	Chaparral, cismontane woodland. On limestone. 4,700–5,250 feet in elevation. Blooms May–July. Perennial.	<i>May occur</i> . Sierran mixed conifer and red fir habitat with limestone substrate potentially suitable for this species is present in the project area. There is a 2018 documented occurrence of <i>Dudleya cymosa</i> ssp. <i>costatifolia</i> approximately 2.2 miles southwest from the project area (CCH2 2022).
Hall's daisy Erigeron aequifolius	_	_	1B.3	Broadleafed upland forest, lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest. On dry rock outcrops in granite walls, crevices, and canyons. 4,920–8,010 feet in elevation. Blooms June– August. Geophyte.	<i>May occur</i> . Sierran mixed conifer forest and montane hardwood habitat with granitic outcrops potentially suitable for this species is present in the project area.
Keil's daisy Erigeron inornatus var. keilii	_	-	1B.3	Dry slopes, meadows, in coniferous forest. 2,290–7,230 feet in elevation. Blooms June–September. Perennial.	<i>May occur</i> . Sierran mixed conifer potentially suitable for this species is present in the project area.
Twisselmann's buckwheat <i>Eriogonum</i> twisselmannii	_	SR	1B.2	Upper montane coniferous forest. Dry, granitic outcrops. 7,790–9,210 feet in elevation. Blooms June– September. Perennial.	<i>May occur</i> . Sierran mixed conifer forest habitat with granitic outcrops potentially suitable for this species is present in the project area.
Kaweah fawn lily Erythronium pusaterii	_	_	1B.3	Subalpine coniferous forest, meadows and seeps. On granitic loam soils and granite outcrops; also on metamorphics. 7,210–9,110 feet in elevation. Blooms May–July. Geophyte.	<i>Known to occur</i> . <i>Erythronium pusaterii</i> was documented on the eastern border of the project area 0.2-0.3 mile southeast of the Stagg Tree. Sierran mixed conifer and freshwater emergent wetland habitat with granitic outcrops and/or metamorphics potentially suitable for this species is present elsewhere in the project area. There are five documented occurrences directly east-southeast of the project area (Calflora 2022; CCH2 2022).
Greenhorn fritillary Fritillaria brandegeei	_	_	1B.3	Lower montane coniferous forest. Granitic soils and open forest. 4,920–7,210 feet in elevation. Blooms April–June. Geophyte.	May occur. Openings in Sierran mixed conifer forest habitat with granitic soils potentially suitable for this species are present in the project area.

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Copper-flowered bird's- foot trefoil <i>Hosackia oblongifolia</i> var. <i>cuprea</i>	_	_	1B.3	Meadows and seeps (edges), upper montane coniferous forest. Wet meadow borders. 7,600–9,190 feet in elevation. Blooms June–August. Geophyte.	<i>May occur</i> . Fresh emergent wetland (e.g., wet meadows) in Sierran mixed conifer habitat potentially suitable for this species is present in the project area. There is a documented occurrence of a <i>Hosackia oblongifolia</i> var. <i>cuprea</i> population (>4,180 individuals observed in 2020) 2.5 miles east-southeast of the project area (CNDDB 2022a).
Field ivesia Ivesia campestris	_	_	1B.2	Subalpine coniferous forest, upper montane coniferous forest, meadows and seeps. Meadow edges. 6,480–11,140 feet in elevation. Blooms May–August. Perennial.	<i>May occur</i> . Meadow habitat potentially suitable for this species is present in the project area. There is a documented occurrence of <i>Ivesia campestris</i> 1.5 miles east of the project area (CNDDB 2022a).
Yosemite lewisia <i>Lewisia disepala</i>	_	_	1B.2	Lower montane coniferous forest, pinyon-juniper woodland, upper montane coniferous forest. Fine gravel on rock outcrops, ridges, or domes. Granitic soils. 3,390–11,490 feet in elevation. Blooms March– June. Perennial.	<i>May occur</i> . Sierran mixed conifer forest habitat with rock outcrops and granitic soils potentially suitable for this species is present in the project area.
Hockett Meadows lupine Lupinus lepidus var. culbertsonii	_	_	1B.3	Meadows and seeps, upper montane coniferous forest. Generally mesic, rocky sites. 6,390– 11,500 feet in elevation. Blooms July–August. Perennial.	<i>May occur</i> . Fresh emergent wetlands/ wet meadows potentially suitable for this species are present in the project area.
Broad-nerved hump moss <i>Meesia uliginosa</i>	_	_	2B.2	Meadows and seeps, bogs and fens in upper montane coniferous and subalpine coniferous forests. Moss on damp soil in or at the edges of wet meadows and fens. Often found on the edge of fens or raised above the fen on hummocks/shrub bases. 3,590–9,210 feet in elevation. Blooms July–October. Perennial.	<i>May occur</i> . Wet meadow habitat potentially suitable for this species is present in the project area.
Purple mountain-parsley Oreonana purpurascens	_	_	1B.2	Ridgetops, generally on metamorphic rocks, in red-fir or lodgepole-pine forests. 6,980– 9,400 feet in elevation. Blooms May–June. Perennial.	<i>May occur</i> . Red fir forest habitat potentially suitable for this species is present in the project area.
Cut-leaf checkerbloom Sidalcea multifida	_	_	2B.3	Lower montane coniferous forest, meadows and seeps, Great Basin scrub, pinyon and juniper woodland. Relatively dry places, sagebrush scrub, pine forest, and lower montane pine forest. 5,740– 9,190 feet in elevation. Blooms May–September. Perennial.	<i>May occur</i> . Relatively dry sites in Sierran mixed conifer habitat potentially suitable for this species is present in the project area.

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Prairie wedge grass Sphenopholis obtusata	_	_	2B.2	Wet meadows, streambanks, ponds. 980–6,570 feet in elevation. Blooms April–July. Perennial.	<i>May occur</i> . Streambank, pond, and wetland habitat potentially suitable for this species is present in the project area.
Grey-leaved violet <i>Viola pinetorum</i> ssp. grisea	_	_	1B.2	Subalpine coniferous forest, upper montane coniferous forest, meadows and seeps. Dry mountain peaks and slopes. 5,180–12,140 feet in elevation. Blooms April–July. Perennial.	<i>May occur</i> . Dry slopes in Sierran mixed conifer habitat potentially suitable for this species is present in the project area.
Special-Status Wildlife					
Amphibians and Reptiles		1			
Western pond turtle <i>Emys marmorata</i>	_	SSC	_	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	<i>May occur.</i> The lower elevation portion of the project area along Alder Creek is at or below the elevational limit for the species (CNDDB 2022b), and limited basking sites may be available directly along the creek; however, species distribution in the project area would be limited by the steep slopes along Alder Creek and because the elevation of the other waters (pond and upper portions of Alder Creek) are above the elevational limit for the species.
Birds					
California spotted owl Strix occidentalis	_	SSC	_	Broadleaved upland forest, lower montane coniferous forest, and upper montane coniferous forest. Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure >40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	<i>Known to occur.</i> Suitable nesting habitat is present in the portions of the project area that burned with low to moderate intensity in the Castle Fire. The species has been documented to occur and nest within the project area (CNDDB 2022a; Colibri 2021).
Mammals		r	r	I	
Fisher - Southern Sierra Nevada ESU <i>Pekania pennanti</i> pop. 2	FE	ST		Intermediate- to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	<i>May occur.</i> Fisher have been documented to occur in the vicinity of the project area (CNDDB 2022a). Surveys conducted in 2021 did not detect fisher in the project area (Colibri 2021); however, the project area is within the range of the species, and suitable denning habitat is present in the areas of the project area where the Castle Fire burned at low intensity.

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Ringtail Bassariscus astutus	-	FP	_	Riparian habitats, forest habitats, and shrub habitats used for denning and foraging in lower to middle elevations.	<i>May occur</i> . Ringtail have not been documented within or adjacent to the project area; however, the species is not tracked in the CNDDB. Surveys conducted in 2021 did not detect ringtail in the project area (Colibri 2021); however, the project area is within the range of the species and cavities in logs, snags, rock outcrops, live trees, and dense shrubs in the project area may provide suitable denning habitat for the species.
Spotted bat Euderma maculatum	_	SSC	-	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	<i>May occur</i> . The species roosts in cracks and crevices within large cliffs (CWHR 2000), and these features are not present within the project area; however, suitable roosting habitat occurs near to the project area and the species may forage in the more open southern portions of the project area.

1 Legal Status Definitions: CESA = California Endangered Species Act; CEQA = California Environmental Quality Act; CNDDB = California Natural Diversity Database; CRPR = California Rare Plant Rank; CWHR = California Wildlife Habitat Relationships; ESA = Endangered Species Act; ESU = Evolutionary Significant Unit; DPS= Distinct Population Segment

#### 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).
- 2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

#### CRPR Threat Ranks:

- 0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
- 0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)
- **State**: FP = Fully Protected (legally protected)
  - SSC = Species of Special Concern (no formal protection other than CEQA consideration)
  - SE = State Listed as Endangered (legally protected)
  - SR = State Rare (legally protected under the Native Plant Protection Act
  - ST = State Listed as Threatened (legally protected)
- **Federal**: FE = Federally Listed as Endangered (legally protected)
- <sup>2</sup> Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present in the treatment area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the treatment area; however, there are little to no other indicators that the species might be present.

Known to occur: The species, or evidence of its presence, has been reported by others.

Sources: Calflora 2022; CCH2 2022; CNDDB 2022a; CNDDB 2022b; CNPS 2022; Colibri 2021; CWHR 2000; Jepson 2022; NatureServe 2022; USFWS 2022.

## **IMPACT BIO-1**

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on the 26 special-status plant species listed in Table 4.5-2, as habitat for these species is present and is proposed to be treated in the project area. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments, because the same treatment activities would occur. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that

were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). However, treatment frequency and intensity can determine whether effects on certain plant species are beneficial or adverse. Initial treatment that reduces overgrowth of competing vegetation, opens the tree canopy to allow more light penetration, or removes invasive competitors can be beneficial for some special-status plant populations; however, repeated treatments at too frequent intervals can have adverse effects on those same special-status plants.

Of the 26 special-status plant species that are known to or may be present in the project area, five species – mountain bentgrass, watershield, Bolander's reedgrass, field ivesia, and broad-nerved hump moss– are typically associated with wetlands (e.g., freshwater emergent wetlands, freshwater forested/shrub wetlands, springs, seeps) (Table 4.5-2). Sixteen special-status plant species – including Abrams' onion, rose-flowered larkspur, greenhorn fritillary, and grey-leaved violet – are associated with upland habitats that are present in the project area. The remaining five special-status plant species – including Kaweah fawn lily, Hockett Meadows lupine, and prairie wedge grass – are facultative species, meaning they may be found in both wetland and upland habitats (Table 4.5-2).

Pursuant to SPR HYD-4, WLPZs ranging from 50 to 150 feet adjacent to all Class I and Class II streams and lakes (defined under Forest Practice Rules as a permanent natural body of water of any size, or an artificially impounded body of water having a surface area of at least 1 acre; CAL FIRE 2020) within the project area would be implemented and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV (e.g., drainage canals, irrigation ditches) streams for prescribed burning, mechanical treatment, manual treatment, and herbicide application, which would minimize some adverse effects on pond and streambank associated species. Requirements under SPR HYD-4 requires the retention of at least 75 percent of surface cover and undisturbed area within WLPZs for wildlife habitat. However, the WLPZ is not a nodisturbance buffer as manual treatments within WLPZs are permitted and up to 25 percent of vegetative cover may be removed, per SPR HYD-4, which could potentially result in loss of special-status plants in pond, streambank, wetland, spring, and seep habitat. Therefore, implementation of WLPZ restrictions under SPR HYD-4 would not be sufficient in protecting special-status plants within the WLPZ. Furthermore, there may be additional on-site wetland habitats (e.g., meadow, spring, and seep) habitat suitable for special-status plants outside of any WLPZ as well as ponds smaller than one acre (i.e., not considered a lake under Forest Practice Rules). Wetland delineations would be conducted to determine if other wetland habitats are located within treatment areas; where wetland habitats are delineated, no-disturbance buffers of at least 25 feet would be established around the wetland (per Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands). Although these measures would avoid and minimize some adverse effects on special-status plants typically associated with wetlands, habitat potentially suitable for the five facultative special-status plant species (i.e., associated with both wetland and upland areas) and the 16 upland special-status plant species would not be avoided under SPR HYD-4 and Mitigation Measure BIO-4. As a result, SPR BIO-7 would be required, which would require a survey for special-status plants before implementing treatments in any habitat potentially suitable for special-status plants, including wetlands. If special-status plant species are found during implementation of SPR BIO-7, Mitigation Measure BIO-1a and/or Mitigation Measure BIO-1b would be required, and no disturbance buffers would be established around plants listed under the California Endangered Species Act (CESA), federal Endangered Species Act (ESA), and other non-listed special-status plants, which would include special-status plants in both wetland and upland habitat. For wetland habitats containing special-status plants, a no-disturbance buffer of 50-feet around the wetland would be required.

SPR BIO-7 would apply to all treatment activities, including maintenance treatments, and protocol-level surveys for special-status plants would be conducted pursuant to *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018, or current version) prior to implementing prescribed burning, mechanical treatment, manual treatment, and herbicide application in any habitat potentially suitable for special-status plants, which would include upland habitat that could potentially contain species that are growing outside of wetlands. Pursuant to SPR BIO-7, surveys would not be required for those special-status plants not listed under ESA or CESA, if the target special-status plant species is an herbaceous annual species, stump-sprouting species, or geophyte species, and the specific treatments may be carried out during the dormant season for that species or when the species has completed its annual life cycle, provided the treatment would not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment, or destroy seedbanks, stumps, or roots, rhizomes, bulbs and other underground parts of special-status plants. However,

this would require that treatments in potentially suitable habitat for these special-status plants be restricted to the dormant season for these species and to treatments that do not disturb below the soil surface (i.e., manual treatments, herbicide application, and prescribed burning) without prior knowledge of their presence, which may unnecessarily or infeasibly constrain treatment implementation.

Ten of the 26 special-status plant species that may occur within the project area are herbaceous annual species or geophytes, as indicated in Table 4.5-2. Impacts on these species would be avoided by treatment activities that do not kill or remove vegetation or disturb the soil (i.e., manual treatment, herbicide application, and prescribed burning) during the dormant season (i.e., when the plant has no aboveground living parts), which would typically occur after seed set and before germination. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). Treatment activities that could potentially kill or remove seeds, stumps, and underground root structures (i.e., mechanical treatments) may result in impacts on these plant species even when dormant and would not be conducted without prior implementation of SPR BIO-7. If treatments that do not kill or remove vegetation or disturb the soil (e.g., manual treatments, herbicide application, and prescribed burning) cannot be completed in the dormant season and would be implemented during the growing period of annual and geophyte species, protocol surveys (per SPR BIO-7) and avoidance of any identified special-status plants (per Mitigation Measures BIO-1a and BIO-1b) must be implemented, as described below. The remaining sixteen of the twenty-six special-status plant species that have potential to occur within the project area are perennial species, which could not be avoided seasonally in the same manner as herbaceous annual species, stump sprouters, or geophytes; therefore, protocol-level surveys under SPR BIO-7 would be necessary to identify them prior to implementing treatment activities regardless of the timing of treatments.

Where protocol-level surveys are required (pursuant to SPR BIO-7) and special-status plants are identified during these surveys, Mitigation Measures BIO-1a or BIO-1b, depending on species status, would be implemented to avoid loss of identified special-status plants. Pursuant to 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 prescribed burning, mechanical treatment, manual treatment, and herbicide application, would not occur unless a qualified RPF or biologist determines, based on substantial evidence, that the species would benefit from the proposed treatment in the occupied habitat area. In the case of plants listed pursuant to ESA or CESA, the determination of beneficial effects would need to be made in consultation with the California Department of Fish and Wildlife (CDFW) and/or USFWS, depending on species status. If treatments are determined to be beneficial and would be implemented in areas occupied by special-status plants, under the specific conditions described under Mitigation Measures BIO-1a and BIO-1b, additional impact minimization and avoidance measures or design alternatives to reduce impacts would be identified. An evaluation of the appropriate treatment design and frequency to maintain habitat function for special-status plants would be carried out by a gualified RPF or botanist. Therefore, habitat function for special-status plants would be maintained because treatment activities and maintenance treatments would be designed to ensure that treatments, including follow-up maintenance, maintain habitat function for the special-status plant species present.

The potential for treatment activities to result in adverse effects on special-status plants was examined in the PEIR. This impact on special-status plants is within the scope of the PEIR, because, within the boundary of the project area, habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), and the treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on special-status plants is also the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would be a change to the project analyzed in the PEIR. Burn plans prepared by the League would include elements that would minimize soil

burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3. For this reason, proposed revisions to SPR AQ-3 would not result in a substantially more severe significant effect on special-status plants than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Biological resource SPRs that apply to project impacts under Impact BIO-1 are SPRs BIO-1, BIO-2, BIO-6, BIO-7, BIO-9, AQ-3, AQ-4, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, and HYD-5. Biological resource mitigation measures that apply to project impacts under Impact BIO-1a and BIO-1b. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT BIO-2

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on specialstatus wildlife species. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for treatment activities to result in adverse effects on special-status wildlife species was examined in the PEIR.

## Western pond turtle

Aquatic habitat potentially suitable for western pond turtle is present within Poppy Lake and South Alder Creek within the project area. However, Poppy Lake is above the typical elevational limit of the species (Table 4.5-2), so it is likely low-quality habitat for this species. Upland habitat for western pond turtle is located up to approximately 1,500 feet from these waters and western pond turtles may nest within this area. The potential for treatment activities, including maintenance treatments, to result in adverse effects on western pond turtle was examined in the PEIR

Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams and Poppy Lake would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water would be established adjacent to all Class III and Class IV streams (e.g., drainage canals, irrigation ditches). However, these measures may not avoid impacts on western pond turtles if turtles are present further than 50 to 150 feet from stream or lake habitat, or in the unlikely event that manual activities implemented within the WLPZ resulted in injury or mortality of turtles. The potential for treatment activities and maintenance treatments to result in adverse effects on western pond turtle was examined in the PEIR.

Per SPR BIO-1, if it is determined that adverse effects on western pond turtles can be clearly avoided by physically avoiding the habitat suitable for these species, then no mitigation would be required. However, because western pond turtles may be present relatively large distances (i.e., up to approximately 1,500 feet) from aquatic habitat in the project area, all habitat potentially suitable for the species cannot be avoided while achieving treatment objectives. As a result, SPR BIO-10 would apply, and focused visual encounter surveys for western pond turtle would be conducted by a qualified RPF or biologist within upland habitat areas suitable for the species before implementation of prescribed burning. Manual treatments, mechanical treatments, and herbicide application treatments are not expected to result in adverse effects on western pond turtles. Personnel implementing manual treatments and herbicide application treatments would conduct these activities on foot and mechanical treatment (i.e., chipping) would occur on established roads, and the likelihood of a turtle or burrow being inadvertently crushed or otherwise destroyed would be low. If western pond turtles are identified during focused surveys conducted per SPR BIO-10, Mitigation Measure BIO-2b for this species would be implemented for prescribed burning.

Under Mitigation Measure BIO-2b, the League would require 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 RPF or biologist as necessary to avoid injury to or mortality of western pond turtles. The League may consult with CDFW for technical information regarding appropriate measures.

Habitat function for western pond turtle would be maintained because treatment activities and maintenance treatments would not occur within aquatic habitat, and pursuant to SPR HYD-4, treatments within stream WLPZs adjacent to the project area would be limited (e.g., no mechanical treatment, retention of at least 75 percent surface cover, no burn piles). 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 spotted owl

Suitable nesting habitat for California spotted owl typically consists of dense mixed conifer forests with high canopy closure and a high total cross-section of trees and snags (Shuford and Gardali 2008). Suitable nesting and foraging habitat for California spotted owl is currently present within the northern and eastern portions of the project area that were subject to low and medium intensity fire during the Castle Fire (Colibri 2021). As the area recovers from the Castle Fire, additional portions of the project area could become more suitable for spotted owl in the future; habitat conditions would be re-assessed prior to treatments. Surveys for California spotted owls were conducted in 2021 and a pair of owls were detected in the project area; however, the pair was not likely nesting during that season (Colibri 2021). Although vegetation treatments would retain one to two snags per acre and retain live conifers 30 inches dbh and larger, retain live hardwoods 20 inches dbh and larger, treatments within the project area could result in direct or indirect adverse effects on California spotted owl by directly destroying or disturbing active nests or 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, including maintenance treatments, to result in adverse effects on California spotted owl was examined in the PEIR.

If treatments can be conducted outside of the season of sensitivity (i.e., nesting season, approximately March 1 through August 15; USFS 2006), then further mitigation would not be required. Outside of the nesting season, spotted owls would likely flee due to the presence of equipment, vehicles, or personnel, which would reduce the risk of their injury or mortality. Adverse effects on California spotted owl would be clearly avoided for treatments that would occur outside of the active nesting season (March 1 through August 15) under SPR BIO-1. However, treatment activities conducted during the California spotted owl nesting season could result in destruction or disturbance of active nests, resulting in nest abandonment, disruption of parental care, and potential loss of young.

If conducting treatments outside of the nesting season for California spotted owl is determined to be infeasible, protocol-level surveys for California spotted owl would be conducted by a qualified RPF or biologist within a 0.25-mile buffer surrounding the treatment area prior to implementation of treatment activities to avoid impacts on the species. Surveys for California spotted owl will be conducted pursuant to the *Protocol for Surveying for Spotted Owls in Proposed Management Activity Areas and Habitat Conservation Areas* (USFS 1993). If nesting California spotted owls are detected, Mitigation Measure BIO-2b would be implemented. Under Mitigation Measure BIO-2b, a no disturbance buffer of 0.25 mile would be established around active California spotted owl nests and no treatment activities would occur within this buffer.

Habitat function for California spotted owl would be maintained because treatment activities and maintenance treatments would not result in removal of live conifers greater than 30 inches dbh, retain hardwoods greater than 20 inches dbh, and would maintain sufficient canopy cover in forested portions of the project area. Furthermore, SPR BIO-3 and Mitigation Measure BIO-3a would be implemented to limit type conversion of Sensitive Natural Communities including the giant sequoia forest and woodland community which comprises the majority of the potential California spotted owl habitat on the project area. In addition, Mitigation Measure BIO-2b would require overstory canopy cover within forest stands occupied by nesting California spotted owl be maintained at 60 percent or greater where it exists, and treatments would maintain tree age class diversity and a sufficient number of young understory trees to facilitate forest regeneration and long-term maintenance of habitat function. Additionally, one to two large snags would be retained per acre with a preference for the largest snags that exhibit the form and decay

characteristics favored by California spotted owl. 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.

#### Fisher

Suitable habitat for fisher is typically coniferous forests and mixed hardwood conifer forests with medium to large size class trees and deciduous-riparian areas with high percent canopy closure (USFS 2019). Fisher den and rest in hollow trees, snags, logs, and rocky areas. The project area is located within a fisher habitat core area, as designated in the Southern Sierra Nevada Fisher Conservation Strategy (Spencer et al. 2016), and portions of the project area currently meet the definition of potential foraging and denning habitat (USFWS 2020). Although the entire project area contained habitat suitable for fisher before the 2020 Castle Fire (CNDDB 2022b), only the portions of the project area that experienced low- to moderate-severity fire (approximately 276 acres) currently contain habitat suitable for fisher. As vegetation regenerates throughout the project area and vicinity, habitat suitable for fisher (e.g., increased canopy closure) is expected to improve. Fisher were documented to occur within the vicinity of the project in the 1990s (CNDDB 2022a). Following the Castle Fire, the project area was surveyed for fisher in 2021 and no fisher were detected (Colibri 2021). The Castle Fire, which totaled approximately 171,000 acres and burned the majority of the North Fork and South Fork Tule River drainage, including the entire project area at varying degrees of intensity, may have resulted in fisher fleeing the project area and vicinity immediately post fire. However, in mid-November of 2022, fisher were detected in two locations within the low-severity burned portion of the project area (Borden, pers. comm., 2022). Initial and maintenance treatments could result in direct or indirect adverse effects on fisher if individuals are present in the project area prior to implementation of treatments. The potential for treatment activities, including maintenance treatments, to result in adverse effects on fisher was examined in the PEIR.

If mechanical and manual treatments can be conducted outside of the season of sensitivity (i.e., maternity season, approximately March 1 through July 31), and prescribed burning can be conducted outside of March 1 through May 1 (USFWS 2020), then mitigation would not be required. Outside of the maternity season, resting fisher would likely flee due to the presence of equipment, vehicles, or personnel, which would reduce the risk of their injury or mortality. Herbicide application treatments are not expected to result in adverse effects on fisher because personnel would conduct these activities on foot and the likelihood of a den being inadvertently disturbed or otherwise destroyed would be very low. In addition, herbicide treatments would not remove or damage potential denning locations. While confers over 30 inches dbh and hardwoods over 20 inches dbh would be retained and these trees are those likely to contain fisher dens, manual treatments, mechanical treatments (i.e., chipping) and prescribed burning conducted during the fisher maternity season and within forest habitat suitable for fisher, could result in destruction of active dens in downed woody debris piles or snags, or disturbance to active dens. Destruction or disturbance of dens may result in loss of females or young, which may not flee from the den or may not yet be capable of fleeing. Adverse effects on fisher would be clearly avoided for manual and mechanical treatments that would occur outside of the fisher maternity season (March 1 through July 31) and for broadcast and pile burning outside of the period March 1 through July 31) and for broadcast and pile burning outside of the period March 1 through May 1 (USFWS 2020) under SPR BIO-1.

If conducting mechanical treatments, manual treatments, and prescribed burning outside of the fisher maternity season in suitable denning/natal habitat is determined to be infeasible, then SPR BIO-10 would be applied, and presence of fisher would be assumed or protocol surveys would be conducted to determine presence prior to implementation of treatment activities. Surveys for fisher would be conducted by a qualified RPF or biologist following the *Survey Protocol for Fisher Denning Season; Methods for Informing Denning Protection Measures* (Tucker et al. 2020). If focused surveys are conducted, and fisher are not detected, then the limited operating period required by Mitigation Measure BIO-2a for the species would not be required. If fisher are detected during focused surveys, then all measures under Mitigation Measure BIO-2a would be implemented. Under Mitigation Measure BIO-2a, it will be assumed that an active fisher den is located in the vicinity and a limited operating period March 1 through July 31 will apply for mechanical treatments and manual treatments, and March 1 through May 1 for broadcast and pile burn activities. If the presence of fisher within the treatment area is assumed, then implementation of the limited operating periods described above for would be required pursuant to Mitigation Measure BIO-2a for manual and mechanical vegetation treatments and prescribed burning. In addition, within fisher habitat, vehicle speeds will be limited to 15 miles per hour to avoid vehicle-caused fisher mortality.

Treatment activities and maintenance treatments would retain a minimum of 40 percent canopy cover in all forested areas, would retain live conifers greater than 30 inches dbh and hardwoods greater than 20 inches dbh, and would retain an average of one to two snags per acre across the project area for use as potential denning and resting sites. Furthermore, SPR BIO-3 and Mitigation Measure BIO-3a would be implemented to limit type conversion of sensitive natural communities including the giant sequoia forest and woodland community, which occupies the majority of the potential fisher habitat in the project area. However, mechanical and manual treatments may result in removal of special habitat features for fisher. Pursuant to Mitigation Measure BIO-2a, in high quality denning habitat the project would be required, when feasible, to retain all conifer snags greater than 35 inches in diameter and all hardwood snags greater than 27 inches in diameter; prioritize retention of large trees (greater than 24 inches dbh) with deformities, broken tops, large branches, and cavities over other trees; leave a widely distributed distribution of snags and downed logs, retaining an average of 2 to 5 logs per acre greater than 20 inches diameter; retain multi-storied canopy in drainages, swales, and north facing slopes; and limit fire intensity in areas with large trees and large snags. In addition, any den structure known to have been active within the past 5 years should be buffered by 60 acres of the most suitable, connected habitat available to form a 'den cluster.' If 60 acres of suitable habitat are not available surrounding the den, then buffer by the amount of connected suitable habitat remaining. In areas meeting the criteria for potential denning habitat where locations of dens are unknown, a biologist familiar with fisher ecology should identify 60 acre 'potential' den clusters, using the definition of high-quality denning habitat. Also, the final determination for habitat function maintenance must be made by the League in consultation with CDFW. Therefore, Mitigation Measure BIO-2a is required for treatment activities, and the League must contact CDFW to seek technical input on the determination that habitat function would be maintained for fisher and input on their proposed measures to avoid injury to or mortality of this species. On December 21, 2022, a memo was sent to Margarita Gordus of CDFW Central Region to fulfill this requirement pursuant to Mitigation Measure BIO-2a. On January 11, 2023, Ascent staff discussed the proposed protection measures for fisher with Margarita Gordus. Consultation with CDFW is complete for fisher and the project-specific measures (see Mitigation Measure BIO-2a in the MMRP for measures; Attachment A) will be implemented by the League.

SNC and the League propose revisions to Mitigation Measure BIO-2a regarding requirements to consult with USFWS. The implementation of the limited operating periods, avoidance measures, and habitat retention measures discussed above have been adapted from USFWS' programmatic biological opinion on USFS projects for the Southern Sierra Nevada Distinct population segment of the fisher (USFWS 2020), which are designed to avoid injury, mortality, disturbance, and significant habitat modification or degradation. USFWS concludes in its programmatic biological opinion that with the implementation of these measures, USFS vegetation treatment projects are "not likely to adversely affect" fisher. The USFS projects included in the biological opinion would occur within similar habitat and include similar treatment activities to the Alder Creek Sequoia Resilience and Post-Fire Restoration Project. The measures from the biological opinion would be applied to the proposed project and would avoid and minimize adverse effects on fisher. The objective of the consultation required under Mitigation Measure BIO-2a is to identify the period of time within which treatment could occur that would avoid injury, disturbance, or mortality of the species (i.e., mechanical and manual treatments conducted outside of March 1 through July 31, and prescribed burning outside of March 1 through May 1) (USFWS 2020), and identify measures to maintain habitat function. The availability of a recent biological opinion with measures that have been previously vetted and recommended by USFWS to avoid adverse effects on fisher in similar habitats for similar vegetation treatment projects provides the information that would be otherwise gained in the consultation. Therefore, additional consultation requirements with USFWS pursuant to the CalVTP PEIR would not be needed for the proposed project.

Mitigation Measure BIO-2a would be revised to require consultation with USFWS only if the habitat retention measures in Mitigation Measure BIO-2a (see full measures in the MMRP; Attachment A) are determined to be infeasible. If the habitat retention measures are infeasible, the League would contact USFWS to seek technical input on the determination that habitat function would be maintained for fisher and input on their proposed measures to avoid injury to or mortality of this species. Because the avoidance and minimization measures in Mitigation Measure BIO-2a are adopted from the USFWS' programmatic biological opinion and USFWS would be consulted if these measures are infeasible, the proposed revisions to Mitigation Measure BIO-2a would not result in a substantially

more severe significant effect on fisher than what was covered in the PEIR. The text revisions to Mitigation Measure BIO-2a are shown in underline and strikethrough in the MMRP (Attachment A).

In the future, if the League determines that additional mitigation beyond Mitigation Measure BIO-2a is necessary to reduce significant impacts on fisher, Mitigation Measure BIO-2c would be required and the League will be required to contact USFWS and additional mitigation may be required for such impacts to species or habitat. 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 primarily nocturnal and typically occurs in riparian areas, forests (including stands of various ages), and areas of dense shrubs (e.g., chaparral habitats, and other areas of dense understory shrubs). Potential denning habitat within the project area includes rock outcrops, crevices, snags, large hardwoods, large conifers, and shrub thickets. While dense shrub thickets are currently limited within the project area due to the 2020 Castle Fire, there is a potential for additional dense shrubs to be present when maintenance treatments are implemented in the future. Camera surveys conducted in 2021 did not detect ringtail within the project area (Colibri 2021). However, this may be due to the effects of the Castle Fire in 2020, and ringtails may have occurred in the project area prior to the fire. Initial vegetation treatments and maintenance treatments would occur over an extended period (i.e., beyond 2023) and could result in direct or indirect adverse effects on ringtail if individuals move into the project area prior to implementation of treatments. The potential for treatment activities, including maintenance treatments, to result in adverse effects on ringtail was examined in the PEIR.

Although initial vegetation treatments would retain one to two snags per acre, retain live conifers 30 inches dbh and larger, retain live hardwoods 20 inches dbh and larger, and would not occur within rock outcrops; initial vegetation treatments may result in direct impacts to ringtail dens through the removal of trees and large snags that contain suitable den sites and through treatment activities within montane chaparral habitat.

For treatments conducted beyond 2023, when ringtails may have relocated to the project area following the Castle Fire, per SPR BIO-1, if it is determined that adverse effects on ringtail can be clearly avoided by conducting treatments outside of the season of sensitivity (i.e., maternity season, approximately April 15–June 30), then mitigation would not be required. Outside of the maternity season, resting ringtails would likely flee due to the presence of equipment, vehicles, or personnel, which would reduce the risk of their injury or mortality. Herbicide application treatments are not expected to result in adverse effects on ringtail dens because personnel would conduct these activities on foot and herbicide treatments would not likely occur in the dense shrub habitat where denning could occur. However, mechanical treatments, manual treatments, and prescribed burning conducted during the ringtail maternity season could result in destruction of active dens within snags and dense shrub habitat. Destruction of dens may result in loss of females and young, which may not flee from the den or may not yet be capable of fleeing. Adverse effects on ringtail would be clearly avoided for mechanical treatments, manual treatments, and prescribed burning that would occur outside of the ringtail maternity season (April 15–June 30) under SPR BIO-1.

If conducting mechanical treatments, manual treatments, and prescribed burning outside of the ringtail maternity season is determined to be infeasible, then SPR BIO-10 would be applied, and presence of ringtail would be assumed, or focused surveys would be conducted to determine presence prior to implementation of treatment activities. Surveys for ringtail would include the use of trail cameras, track plates, and other non-invasive survey methods to determine whether ringtails are present within the treatment area and would be conducted by a qualified RPF or biologist. If baited trail cameras are used (e.g., baited with fish, cat food, or strawberry jam), the qualified professionals should obtain a valid CDFW Scientific Collecting Permit before using bait. If focused surveys are conducted, and ringtails are not detected, then further mitigation for the species would not be required. If ringtails are detected during focused surveys, then additional surveys would be required to determine whether an active ringtail den is present within the treatment area. If an active den is identified by a qualified RPF or biologist, due to the fully protected species status of ringtail, Mitigation Measure BIO-2a would be implemented. Under Mitigation Measure BIO-2a, a no-disturbance buffer would be established around the den, the size of which would be determined through consultation with CDFW. No treatment activities would occur within this buffer.

If the presence of ringtail within the treatment area is assumed, then implementation of avoidance and minimization measures would be required pursuant to Mitigation Measure BIO-2a before and during implementation of mechanical treatments and prescribed burning between April 15 and June 30. Avoidance and minimization measures would include but not be limited to pre-treatment den surveys, daily sweeps of the treatment area, and biological monitoring.

Habitat function for ringtail would be maintained because treatment activities and maintenance treatments would not result in removal of live conifers greater than 30 inches dbh, retain live hardwoods greater than 20 inches dbh, and would retain and average of one to two snags per acre across the project area, which would retain the most likely features to be used by this species due to the cover provided by larger trees and snags. Additionally, rocky areas would not be targeted for vegetation treatment and treatments would maintain at least 35 percent relative final density of shrub vegetation (refer to Section 2.2.4, "Treatment Activities"). Furthermore, SPR BIO-4 would be implemented to limit removal of riparian vegetation. Pursuant to Mitigation Measure BIO-2a, the final determination for habitat function maintenance must be made by the League in consultation with CDFW. Therefore, if Mitigation Measure BIO-2a is required for treatment activities, the League would contact CDFW to seek technical input on the determination that habitat function would be maintained for ringtail and input on their proposed measures to avoid injury to or mortality of this species. On December 21, 2022, a memo was sent to Margarita Gordus of CDFW Central Region to fulfill this requirement pursuant to Mitigation Measure BIO-2a. On January 11, 2023, Ascent staff discussed the proposed protection measures for ringtail with Margarita Gordus. Consultation with CDFW is complete for ringtail and the project-specific measures (see Mitigation Measure BIO-2a in the MMRP for measures; Attachment A) will be implemented by the League. 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.

#### Spotted bat

Spotted bat roosts in cracks and crevices within large cliffs (CWHR 2000), and these features are not present within the project area; however, suitable roosting habitat occurs near to the project area and the species may forage in the more open southern portions of the project area. Initial vegetation treatments and maintenance treatments are not likely to have an adverse effect on spotted bat foraging within the project area because treatments would not result in a substantial effect on the amount of prey species, and treatments would occur during the day when spotted bats are not likely to be foraging in the treatment area. Vegetation treatments would maintain at least 35 percent relative final density of shrub vegetation and would retain live conifers greater than 30 inches dbh and hardwoods greater than 20 inches dbh. These retention standards, combined with SPR BIO-3, SPR BIO-4, and SPR HYD-4, would maintain habitat function of the project area for foraging spotted bats. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### Conclusion

The potential for treatment activities to result in adverse effects on special-status wildlife was examined in the PEIR. This impact on special-status wildlife is within the scope of the PEIR, because, within the boundary of the area, general habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape); and the treatment activities, intensity of disturbance as a result of implementing treatment activities, and potential effects on special-status wildlife are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact on special-status wildlife is also the same, as described above. SNC and the League propose revisions to Mitigation Measure BIO-2a regarding requirements to consult with USFWS, which would be a change to the project analyzed in the PEIR. Because the project-specific avoidance and minimization measures in revised Mitigation Measure BIO-2a are adopted from the USFWS' programmatic biological opinion and USFWS would be consulted if these measures are infeasible, the proposed revisions to Mitigation Measure BIO-2a would not result from the USFWS' programmatic biological opinion and USFWS would be consulted if these measures are infeasible, the proposed revisions to Mitigation Measure BIO-2a would not result in a substantially more severe significant effect on fisher than what was covered in the PEIR. Road

decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport).

Biological resource SPRs that apply to project impacts under Impact BIO-2 are SPRs BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-10, GEO-1, and HYD-4. Biological resource mitigation measures that apply to project impacts under Impact BIO-2 are Mitigation Measure BIO-2a, Mitigation and Measure BIO-2b. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT BIO-3

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on sensitive habitats, including designated sensitive natural communities. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed; however, retreatment at too great a frequency could result in additional adverse effects. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for treatment activities, including maintenance treatments, to adversely affect sensitive habitats was examined in the PEIR.

Based on species ranges, occurrence data, vegetation mapping, aerial photos, and the reconnaissance-level survey of the treatment area, the following sensitive habitats (as identified in Manual of California Vegetation and CalVTP PEIR) are not anticipated to occur within the treatment area: bigleaf maple forest and tanoak forest.

Review of the EVEG mapping of the treatment area prior to the 2020 Castle Fire determined that the following vegetation types were present: montane chaparral (21.8 acres), montane hardwood (25 acres), red fir (21.6 acres), and Sierran mixed conifer (459.7 acres).

Based on the habitat types mapped pre-fire in the project area and the reconnaissance-level survey conducted pursuant to SPR BIO-1, 17 sensitive natural communities (i.e., natural communities with a rarity rank of S1, S2, or S3) may be present in the project area. The sensitive natural communities, associated rarity rank, and habitat type within which the communities may occur are presented in Table 4.5-3. In addition, montane hardwood consisting of California black oak (*Quercus kelloggii*) (FRST 2020), which is a sensitive habitat pursuant to the Oak Woodlands Conservation Act and PRC Section 21083.4, may occur in the project area. Bolded sensitive natural communities in Table 4.5-3 were observed during SPR BIO-1 in the project area.

During the reconnaissance-level survey conducted pursuant to SPR BIO-1, several species associated with these sensitive natural communities were observed, including giant sequoia, incense cedar (*Calocedrus decurrens*), red fir (*Abies magnifica*), and bush chinquapin (*Chrysolepis sempervirens*). According to the Manual of California Vegetation, giant sequoia sensitive natural community has membership rules such that emergent giant sequoia trees are dispersed throughout the stand with greater than 10 percent absolute canopy cover (Sawyer et al. 2009). Giant sequoia sensitive natural community was observed throughout the project area. While not all of the dominant species associated with sensitive natural communities included in Table 4.5-3 were observed during the reconnaissance-level survey, these communities may be present. As a result, prior to implementation of treatment activities, SPR BIO-3 would be implemented and a qualified RPF or biologist would identify sensitive natural communities in the treatment area to the alliance level pursuant to Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018) and using the Manual of California Vegetation (including updated natural communities data at http://vegetation.cnps.org/).

Sensitive Natural Community <sup>1</sup>	Rarity Rank <sup>2</sup>	Habitat Type
Giant sequoia forest and woodland	S3	Sierra Mixed Conifer
Incense cedar forest and woodland	S3	Sierra Mixed Conifer
Red fir - white fir forest	S3	Red Fir
Bush chinquapin chaparral	S3	Montane Chaparral
California buckeye groves	S3	Montane Hardwood
Rocky Mountain maple thickets	\$3?	Montane Riparian
Mountain alder thicket	S3	Montane Riparian
Torrent sedge patches	S3	Montane Riparian
Oregon ash groves	S3	Montane Riparian
Black cottonwood forest and woodland	S3	Montane Riparian
Interior rose thicket	S3	Montane Riparian
Geyer's willow thicket	S2	Montane Riparian
Jepson willow thicket	S3	Montane Riparian
Lemmon's willow thicket	S3	Montane Riparian
Yellow willow thicket	S2	Montane Riparian
Tea-leaved willow thicket	S2?	Montane Riparian
Wild grape (California grape) shrubland	S3	Montane Riparian

 Table 4.5-3
 Sensitive Natural Communities Documented or with Potential to Occur in the Project Area

These are designated sensitive natural communities with a state rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

<sup>2</sup> Older ranks, which need to be updated by CDFW, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats. A question mark (?) denotes an inexact numeric rank because there are insufficient samples over the full expected range of the type, but existing information points to this rank.

Source: Sawyer et al. 2009, Compiled by Ascent Environmental in 2022.

Riparian habitat is present within the project area adjacent to streams and ponds. Under SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I and Class II streams and lakes would be implemented for prescribed burning, mechanical treatment, manual treatment, and herbicide application, which would limit the extent of treatment activities within riparian habitat. While these SPRs would reduce potential impacts on riparian habitat, the extent of riparian habitat within the project area has not been mapped and riparian habitat may be present outside of the areas encompassed within WLPZs. As a result, prior to implementation of treatment area. As required under SPR BIO-4, treatments in riparian habitats would retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation and would be limited to removal of uncharacteristic or undesired fuel loads (e.g., dead or dying vegetation, invasive plants). Additionally, prior to any treatments in riparian habitat, the League would notify CDFW pursuant to California Fish and Game Code 1602, when required.

As described above, montane chaparral habitat is present within the project area. As required by SPR BIO-5, treatments implemented in chaparral would be designed to avoid type conversion of chaparral vegetation and to maintain chaparral habitat function. This would include identifying the chaparral vegetation types to the alliance level, determining appropriate treatment prescriptions based on current fire return interval departure and condition class of the chaparral vegetation alliances on-site, retaining at least 35 percent relative final density of mature chaparral vegetation, and retaining a mix of middle to older aged shrubs to maintain heterogeneity. The League would demonstrate with substantial evidence that the habitat function of the specific chaparral vegetation types (i.e., alliances) present would be maintained or enhanced by the treatments applied. Ecological restoration treatments would not be implemented in stands of chaparral vegetation that are within their natural fire return interval unless the League demonstrates with substantial evidence that the habitat function of the specific nucleus the League demonstrates with substantial evidence that the habitat function of the chaparral vegetation treatments would not be implemented in stands of chaparral vegetation that are within their natural fire return interval unless the League demonstrates with substantial evidence that the habitat function of the chaparral vegetation alliances would be improved.

The League would avoid impacts on sensitive natural communities and oak woodlands by avoiding treatments in these communities. However, if avoiding treatment activities within identified sensitive natural communities or oak woodlands would preclude achieving treatment objectives, then Mitigation Measure BIO-3a would apply in these areas to ensure that the characteristics which qualify the communities as sensitive (e.g., dominant canopy species, canopy relative percentage of dominant species, species composition) are retained post-treatment to the extent feasible. Under Mitigation Measure BIO-3a, a qualified RPF or biologist would determine the natural fire regime, condition class, and fire return interval for each sensitive natural communities and oak woodlands would be designed to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function. If habitat function of sensitive natural communities or oak woodlands would not be maintained through implementation of Mitigation Measure BIO-3a, then Mitigation Measure BIO-3b and Mitigation Measure BIO-3c would apply, and unavoidable losses of these resources would be compensated through restoration or preservation of these vegetation types within or outside of the project area.

The potential for treatment activities to result in adverse effects on sensitive habitats, as described above, was examined in the PEIR. This impact on sensitive habitats is within the scope of the PEIR, because, within the project area boundary, general habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), and the treatment activities and intensity of disturbance as a result of implementing treatment activities would be consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing environmental conditions outside the treatable landscape in the project area are essentially the same as those within the treatable landscape; therefore, the potential impact on sensitive habitats is also the same. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Biological resource SPRs that apply to project impacts under Impact BIO-3 are SPRs BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-7, HAZ-5, HAZ-6, HYD-3, HYD-4, and HYD-5. Biological resource mitigation measures that apply to project impacts under Impact BIO-3 are Mitigation Measure BIO-3a, Mitigation Measure BIO-3b, and Mitigation Measure BIO-3c. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT BIO-4

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on state or federally protected wetlands. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for treatment activities to result in adverse effects on state or federally protected wetlands was examined in the PEIR.

During the reconnaissance-level survey conducted pursuant to SPR BIO-1, multiple types of aquatic habitat were observed, including Alder Creek and a freshwater pond. Seasonal wetlands were also observed during the survey and wet meadows appear evident on aerial imagery. CAL FIRE's FRAP vegetation data for the project area includes 0.9 acres of lacustrine habitat (i.e., reservoirs, lakes, ponds) (Table 4.5-1). The National Wetlands Inventory classifies the project area as having approximately 1.24 acres of riverine habitat (e.g., South Alder Creek), 1.16 acres freshwater pond, 0.33 acres freshwater forested/shrub wetland, and 3.34 acres freshwater emergent wetland (USFWS 2021). Wetlands mapped by NWI as fresh emergent wetlands likely include wet meadows.

Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I (e.g., South Alder Creek) and Class II streams would be implemented, and WLPZs of sufficient size to avoid degradation of downstream beneficial uses of water

would be established adjacent to all Class III and Class IV streams within the project area for prescribed burning, mechanical treatment, manual treatment, and herbicide application. Establishment of WLPZs would result in avoidance of stream and pond habitat for prescribed burning, mechanical treatment, manual treatment, and herbicide application.

Additional wetlands may be present throughout the project area that have not been identified or mapped as well as ponds smaller than 1 acre (i.e., not considered a lake under Forest Practice Rules), seasonal wetlands, wet meadows, springs, and seeps. Features mapped as wetlands in the NWI, including fresh emergent wetlands, are not associated with lakes or streams, and would not be protected by implementation of SPR HYD-4 WLPZs. Mitigation Measure BIO-4 would apply to all treatment activities, and a qualified RPF or biologist would delineate the boundaries of wetland features; establish an appropriate buffer (with a minimum of 25 feet) around seasonal wetlands, springs, seeps, and other wetlands; and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). A larger buffer may be required if wetlands or other aquatic habitats contain habitat potentially suitable for special-status plants or special-status wildlife (e.g., foothill yellow-legged frog, southern mountain yellow-legged frog, and western pond turtle; see Impact BIO-1 and Impact BIO-2).

The potential for treatment activities to adversely affect state or federally protected wetlands was examined in the PEIR. This impact on wetlands is within the scope of the PEIR, because, within the project area boundary, general habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), and the treatment activities and intensity of disturbance as a result of implementing treatment activities would be consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, because the existing environmental conditions outside the treatable landscape in the project area are essentially the same as those within the treatable landscape, the potential impact on wetlands is also the same. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Biological resource SPRs that apply to project impacts under Impact BIO-4 are SPRs BIO-1, BIO-2, BIO-3, BIO-9, GEO-1, GEO-3, GEO-4, GEO-5, GEO-6, GEO-7, HAZ-5, HAZ-6, HYD-1, HYD-4, and HYD-5. The biological resource mitigation measure that applies to project impacts under Impact BIO-4 is Mitigation Measure BIO-4. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT BIO-5

Initial vegetation treatments and maintenance treatments could result in direct or indirect adverse effects on wildlife movement corridors and nurseries. Potential impacts resulting from maintenance activities would be similar to those resulting from initial vegetation treatments because the same treatment activities are proposed. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for treatment activities to result in adverse effects on wildlife movement corridors and nurseries was examined in the PEIR.

Based on review and survey of project-specific biological resources (SPR BIO-1), the project area is located within a mapped essential connectivity area that connects natural habitats north and southwest of the project area (CNDDB 2022c). In addition to this landscape-level corridor, Alder Creek, which flows within the northern portion of the project area, likely provides a local movement corridor for wildlife species. The unburned riparian corridor of Alder Creek may be particularly important for movement of some species because the 2020 Castle Fire reduced vegetation cover and habitat complexity in burned areas of the project area and surrounding forest, resulting in reduced suitability for movement or nursery sites in these areas.

Fuel break treatments would remove downed dead and dying/burned vegetation and limited live vegetation within a network of previously established dirt roads on the project area. The fuel breaks would be 12-feet wide and vegetation would be retained along the edges of the fuel breaks. The establishment and maintenance of fuel breaks within existing roads would not fragment habitat for wildlife; the roads are existing, and the traffic level would not be increased. Outside of fuel breaks, ecological restoration treatments would be implemented, which would be designed to improve the health of the forest and other habitats on the project area.

Pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I (Alder Creek) and Class II streams would be implemented, which would limit the extent of treatment activities within riparian habitat (e.g., no mechanical treatment, no burn piles, retention of at least 75 percent surface cover) that would likely function as a wildlife movement corridor. Live conifers larger than 30 inches dbh and live hardwoods larger than 20 inches dbh would be retained and pursuant to SPRs BIO-3, BIO-4, and BIO-5, treatments in sensitive natural communities, riparian habitat, and montane chaparral habitat, respectively, would be designed to maintain habitat function of these communities. With implementation of SPRs, habitat function within the project area would be maintained and there would not be a substantial change in the existing conditions that facilitate wildlife movement or provide nursery habitat in the project area.

If during surveys conducted pursuant to SPR BIO-10 wildlife nursery sites (e.g., deer fawning areas, common bat roosts) are detected, Mitigation Measure BIO-5 would apply to all treatment activities and a no-disturbance buffer would be established around these features, the size of which would be determined by a qualified biologist or RPF.

The potential for treatment activities to result in adverse effects on wildlife movement corridors and nurseries was examined in the PEIR. This impact is within the scope of the PEIR, because, within the project area, general habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), and the treatment activities and extent of expected disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, because the existing environmental conditions outside the treatable landscape in the project area are essentially the same as those within the treatable landscape, as described above, the potential impact on wildlife movement corridors is also the same. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Biological resource SPRs that apply to project impacts under Impact BIO-5 are SPR BIO-1, SPR BIO-2, SPR BIO-3, SPR BIO-4, SPR BIO-5, and SPR HYD-4. The biological resource mitigation measure that applies to project impacts under Impact BIO-5 is Mitigation Measure BIO-5. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT BIO-6

A large portion (245 acres) of the project area was burned during the 2020 Castle Fire, and currently there is little shrub cover or live tree canopy in that area; however, the remaining standing dead trees in the burned treatment area may provide habitat for cavity nesting species. In addition, as this area recovers from the 2020 Castle Fire, shrubs and tree canopy are likely to regenerate and provide additional wildlife habitat in the future. The remainder of the project area (276 acres) was subject to low-intensity fire or was unburned by the fire and provides habitat for ground, shrub, canopy, and cavity nesting species. Vegetation treatments within the project area 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. The potential for treatment activities to result in adverse effects on habitat or abundance of common wildlife was examined in the PEIR.

Vegetation treatments, including maintenance treatments are planned to occur during the nesting bird season (February 1–August 31); therefore, vegetation treatments, including maintenance treatments, road repairs, and road decommissioning 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, chainsaws, vehicles, personnel), potentially resulting in abandonment and loss of eggs or chicks. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPR BIO-12 would apply, and for treatments implemented during the nesting bird season, 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 establishing an appropriate buffer around the nests, modifying treatments to avoid disturbance to the nests, or deferring treatment until the nests are no longer active as determined by a qualified biologist. SPRs applicable to this impact are SPRs BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and BIO-12.

This potential for adverse effects on wildlife habitat or the abundance of common wildlife, including nesting birds, is within the scope of the PEIR because, within the project area, general habitat characteristics are essentially the same within and outside the treatable landscape (e.g., no resource is affected on land outside the treatable landscape that would not also be similarly affected within the treatable landscape), and the proposed treatment activities and intensity of disturbance as a result of implementing treatment activities are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, because the existing environmental conditions outside the treatable landscape in the project area are essentially the same as those within the treatable landscape, as described above, the potential impact on common wildlife, including nesting birds is also the same. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). 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

## **IMPACT BIO-7**

The only applicable local ordinance relevant to biological resources is the Tulare County Watercourse Protective Maintenance Ordinance (Section 4-27-1345, Chapter 27, "Storm Water Quality and Regulation"). The Tulare County Watercourse Protective Maintenance Ordinance states that healthy bank vegetation shall not be removed beyond what is necessary for maintenance purposes, and vegetation will not increase erosion issues for watercourses. The ordinance also states that the property owner will comply with all laws, rules, and regulations of local, state, and federal agencies that may have jurisdiction over wetlands and waterways. Maintenance must be conducted in a manner that does not negatively impact waterway species. The Sierra Nevada Conservancy and Save the Redwoods League will follow all rules and regulations pertaining to waterways at the local, state, and federal levels for all project components. Furthermore, SPR BIO-4 requires the League to design treatments to avoid loss or degradation of riparian habitat function and pursuant to SPR HYD-4, a WLPZ of 50 to 150 feet adjacent to all Class I (Alder Creek) and Class II streams would be implemented, which would limit the extent of treatment activities within riparian habitat (e.g., no mechanical treatment, no burn piles, retention of at least 75 percent surface cover). In addition, Mitigation Measure BIO-4 requires the delineation of wetlands and application of appropriate buffers.

The Grading Activities Exempted Ordinance (Section 7-15-1360[d], Chapter 15, "Building Regulations") exempts an excavation which (a) is less than 2 feet in depth, or (b) which does not create a cut slope greater than 5 feet in height and steeper than one and one half (1 ½) horizontal to one vertical from triggering the requirement for a grading permit. This ordinance is applicable to the re-grading of existing roads, provided the re-grading is performed in accordance with those standards. Section 7-15-1360(e) exempts a fill which is less than one foot in depth and placed on natural terrain with a slope flatter than five feet horizontal to one foot vertical, when applicable to the re-grading of existing roads performed in accordance with the standards contained in Section 7-15-1360. Section 7-15-1360(i) exempts grading projects not otherwise exempt under Section 7-15-1360, where grading requires movement of less than 1250 cubic yards of material, provided grading is to take place on slopes of less than thirty percent and does not

obstruct a drainage course; or where the grading is to take place on slopes of less than five percent. If the proposed activities do not satisfy the exemption criteria, the League would acquire a grading permit. Thus, implementation of treatment activities would not conflict with local ordinances.

The potential for treatment activities to conflict with local policies or ordinances was examined in the PEIR. The potential for the treatment project to conflict is within the scope of the PEIR because vegetation treatment projects implemented under the CalVTP that are subject to local policies or ordinances would be required to comply with any applicable county, city, or other local policies, ordinances, and permitting procedures related to protection of biological resources, per SPR AD-3. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the project area boundary, the existing regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential for conflicts with local policies or ordinances is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## IMPACT BIO-8

Implementation of the proposed vegetation treatment and maintenance treatments would not result in a conflict with adopted habitat conservation plans (HCP) or natural community conservation plans (NCCP), because the project area is not within the plan area of any adopted HCP or NCCP. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the project area boundary, the existing regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential for conflicts with an adopted HCP or NCCP is also the same. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because they would not be located within an area containing an adopted HCP or NCCP. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

## NEW BIOLOGICAL RESOURCE IMPACTS

The proposed treatment is consistent with the treatment types and activities considered in the CalVTP PEIR. The sitespecific characteristics of the proposed treatment project 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to biological resources that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Revisions to SPR AQ-3 would constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS). The USFS burn plan template requires elements needed to design a prescribed burn that will minimize soil burn severity to reduce the potential for runoff and soil erosion; therefore, revisions to SPR AQ-3 would not result in a new impact that was not covered in the PEIR. Revisions to Mitigation Measure BIO-2a regarding requirements to consult with USFWS would be a change to the project analyzed in the PEIR. Because the avoidance and minimization measures in Mitigation Measure BIO-2a are adopted from the USFWS' programmatic biological opinion, USFWS would be consulted if these measures are infeasible, and Mitigation Measure BIO-2a as revised would be equally protective as this mitigation measure as presented in the PEIR, the proposed revisions to Mitigation Measure BIO-2a

would not result in a new impact that was not covered in the PEIR. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to biological resources are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts of the proposed treatment project are also consistent with those considered in the PEIR. Impacts resulting from proposed revisions to SPR AQ-3 and Mitigation Measure BIO-2a are consistent with the impacts analyzed in the program, as explained above. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, revisions to SPR AQ-3, revisions to Mitigation Measure BIO-2a, and the inclusion of road decommissioning would not 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 i	n the PEIR			Pi	roject-Spe	cific Check		
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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	AQ-3 AQ-4 GEO-1 through 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	AQ-3 GEO-1 through GEO-5 GEO-7 GEO-8	NA	LTS	No	Yes

Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Geology, Soils, Paleontology, and Mineral Resource Impacts:</b> Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

## Discussion

The project area is located in a seismically active region that is influenced by three major physiographic and geologic provinces. These provinces include the Sierra Nevada, San Joaquin Valley, and, to a lesser extent, the Coastal Range (CGS 2002). While there are no active faults, several active or potentially active faults have been identified within 100 miles of the southern section of the project area. The major active faults in the area are the San Andreas, approximately 85 miles west, and Owens Valley, which is approximately 53 miles east.

The project area is surrounded almost entirely by the Giant Sequoia National Monument, administered by the Sequoia National Forest. Slopes are variable throughout the project area, with some areas being steep and rocky slopes in gravelly soils. Soils supporting the Sierran mixed conifer habitat are varied, derived primarily from Mesozoic granitic, Paleozoic sedimentary and volcanic rocks, and Cenozoic volcanic rocks. Serpentine soils, found primarily in the northern mixed conifer zone, support a number of endemic plants. Soils are deep to shallow. Fissures and cracks in granitic parent material often support forest growth, even where soil development is shallow (NRCS 2019).

## IMPACT GEO-1

Vegetation treatments would include ecological restoration and fuel breaks through use of pile burning, broadcast burning, mechanical treatment, manual treatment, and targeted ground application of herbicides. These activities could result in varying levels of soil disturbance and have the potential to increase the 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 that contain steep slopes, or in areas that previously experienced fire. This impact is within the scope of the PEIR because the use and type of equipment, extent of vegetation removal, and intensity of prescribed burning are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the potential impact related to soil erosion is also the same, as described above. SPRs applicable to this treatment project are GEO-1 through GEO-8, AQ-3, and AQ-4. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would be a change to the project analyzed in the PEIR. Burn plans prepared by the League would include elements that would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3. For this reason, proposed revisions to SPR AQ-3 would not result in greater soil erosion and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect related to soil erosion than what was covered in the PEIR.

The proposed project includes a revision to SPR HYD-2 to allow road maintenance and repair and the addition of road decommissioning activities, as described in Sections 1.1.3, 2.2.3, and 2.2.4. To perform this work, a change to SPR HYD-2 would be required, which is described in Sections 1.1.3 and 4.10, "Hydrology and Water Quality." Soil disturbance would occur during road maintenance and repair and would result in a permanent reduction in the potential for erosion when completed. The existing roads in the project area need maintenance to improve drivability, to reduce the potential for erosion, and to function as a non-shaded fuel break. The project would include resurfacing of 0.04 mile of road with gravel and minor repair along 5.7 miles of existing unpaved roads. The equipment used to repair and maintain the roads would be similar to the equipment used for mechanical treatment activities including the implementation of fuel breaks (e.g., wheeled tractors, crawler-type tractors, dozers, or front-end loaders). SPRs GEO-1 through GEO-5, GEO-7, and GEO-8 would be implemented to reduce the risk of erosion during construction. Because the activities would be temporary, would result in a decreased risk of erosion in the long term, would have a similar impact as previously analyzed mechanical treatment activities, and the SPRs listed would be implemented, the proposed revision to SPR HYD-2 for road repair would not result in any substantially more severe erosion impacts as evaluated in the PEIR.

Numerous roads and skid trails exist in the project area, many from previous logging operations. Roads and skid trails that would not be needed to conduct treatments or maintenance activities proposed in this project and that would not be useful as fire breaks are proposed for decommissioning. Decommissioning is proposed for 100-150 feet of roads and skid trails and may include a combination of blocking of entranceways, revegetation and installing water bars, removal of fill, establishing drainageways, removing unstable road shoulders, and complete removal and recontouring and restoration of natural slopes. Road decommissioning would not occur on slopes over 50 percent. As noted in SPR GEO-5, Forest Practices Rules 914.6, 934.6, and 954.6 require the construction of waterbreaks on roads and skid trails. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the equipment that would be used to decommission the roads and skid trails would be similar to the equipment that would be used for mechanical

treatment activities analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs GEO-1 through GEO-5, GEO-7, and GEO-8 would be implemented to reduce risk of erosion during decommissioning. Because the activities would be temporary, would result in a decreased risk of erosion in the long term, would have a similar impact as previously analyzed mechanical treatment activities, and the SPRs listed would be implemented, the addition of road and skid trail decommissioning would not result in any substantially more severe impacts on any of the resources evaluated in the PEIR.

## IMPACT GEO-2

Treatment activities would include pile burning, broadcast burning, mechanical treatment, manual treatment, and targeted use of herbicides. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). No areas with known landslide activity are identified within the project area (USGS 2022). However, given the variable topography in some of the treatment areas, the remoteness of the area, steep terrain, and the potential for work during wet winter conditions, there is the potential for landslides in the project area. The potential for treatment activities to increase landslide risk was examined in the PEIR. This impact is within the scope of the PEIR because the extent of vegetation removal, intensity of prescribed burning, and characteristics of the geographical terrain are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the range of slopes and landslide conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Therefore, the potential impact related to landslide risk is also the same, as described above. SPRs applicable to the proposed project are GEO-1, GEO-3, GEO-4, GEO-7, GEO-8, and AQ-3. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would be a change to the project analyzed in the PEIR. Burn plans prepared by the League would include elements that would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3. For this reason, proposed revisions to SPR AQ-3 would not result in an increased risk of landslide by removing root systems that stabilize slopes, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect related to landslide risk than what was covered in the PEIR.

The proposed project includes a revision to SPR HYD-2 for road maintenance and repair and the addition of road decommissioning activities, as described in Section 1.1.3 and in Impact GEO-1, above. These activities would cause temporary soil exposure during construction but would result in a permanent reduction in the potential for landslides when completed and stabilized. The project would include resurfacing of 0.04 linear mile of road with gravel and minor repair along 5.7 miles of existing unpaved roads. The equipment that would be used to resurface and repair the roads is similar to the equipment that would be used for mechanical treatment activities analyzed in the PEIR (e.g., wheeled tractors, crawler-type tractors, dozers, or front-end loaders). Stabilization of these roads would permanently reduce the risk of landslides. SPRs GEO-1 through GEO-5, GEO-7, and GEO-8 would be implemented. SPR GEO-8 requires a Registered Professional Forester or licensed geologist to evaluate slopes greater than 50 percent for landslide risk and mitigate that risk. Because the activities would be temporary, would result in a decreased landslide risk, would have a similar impact as previously analyzed mechanical treatment activities, and the SPRs listed would be implemented, the proposed revision of SPR HYD-2 for road maintenance and repair would not result in any substantially more severe landslide impacts as evaluated in the PEIR.

Roads and skid trails that are not needed to conduct the treatments or maintenance activities proposed in this project and that are not useful as fuel breaks, are proposed for decommissioning. As described in Section 1.1.3 and in Impact GEO-1, decommissioning is proposed for 100-150 feet of roads and skid trails. Road decommissioning would not occur on slopes over 50 percent. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the equipment that would be
used to decommission the roads and skid trails would be similar to the equipment that would be used for mechanical treatment activities analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs GEO-1 through GEO-5, GEO-7, and GEO-8 would be implemented to reduce risk of landslide during decommissioning. Because the activities would be temporary, would result in a decreased landslide risk, would have a similar impact as previously analyzed mechanical treatment activities, and the SPRs listed would be implemented, the addition of road and skid trail decommissioning would not result in any substantially more severe landslide impact then evaluated in the PEIR.

#### NEW GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatment project 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to geology and soils that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. Revisions to SPR AQ-3 would constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS). The USFS burn plan template would include elements that would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3 and analyzed in the PEIR; therefore, revisions to SPR AQ-3 would not result in a new impact that was not covered in the PEIR. The additional activities proposed for road decommissioning, as well as the revision to SPR HYD-2, reduce the long-term risk of erosion and landslide and are not substantially different than the temporary risk of erosion and landslide that exists with mechanical treatment on slopes previously analyzed in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, the revision to SPR HYD-2, and inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to geology, soils, paleontology, or mineral resources would occur that is not covered in the PEIR.

## 4.7 GREENHOUSE GAS EMISSIONS

Impact i	n the PEIR			Pi	oject-Spe	cific Check	list			
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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	SU	Impact GHG- 2, pp. 3.8-11 – 3.8-17	Yes	AQ-3	GHG-2	SU	No	Yes		

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because 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.

<b>New GHG Emissions Impacts:</b> Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

# Discussion

#### IMPACT GHG-1

Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments would result in greenhouse gas (GHG) emissions. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Consistency of treatments under the CalVTP with applicable plans, policies, and regulations aimed at reducing GHG emissions was examined in the PEIR. This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment, duration of use, and resultant GHG emissions, are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the same plans, policies, and regulations adopted to reduce GHG emissions apply in the areas outside the treatable landscape, as well as areas within the treatable landscape; therefore, the GHG impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and for similar durations of time. SPR GHG-1 is not applicable to the proposed project; SNC or the League is not subject to the requirement to provide

information to inform reporting under the Board of Forestry and Fire Protection's Assembly Bill 1504 Carbon Inventory Process because this project is not a registered offset project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### IMPACT GHG-2

Use of vehicles and mechanical equipment and prescribed burning during initial and maintenance treatments would result in GHG emissions. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for treatments under the CalVTP to generate GHG emissions was examined in the PEIR and found to be significant and unavoidable after the application of all feasible mitigation measures because of the infeasibility of implementing specific emission reduction techniques and the uncertainties associated with all the parameters and objectives of prescribed burning. Mitigation Measure GHG-2 in the CalVTP PEIR requires implementation of feasible methods to reduce the GHG emissions from prescribed burning, including pile burning. Accordingly, the League is proposing the use of air curtain burners. The essential function of these technologies is to reduce smoke, and resultant GHG emissions compared to pile burning by consuming biomass quickly and efficiently. According to a 2020 study of biomass, air curtain burners emit 54 percent less CO2 emissions compared to pile burning (Puettman et al. 2020). Additionally, the production of biochar by these technologies and subsequent application as a soil amendment provides long-term carbon sequestration benefits that are not available from pile burning.

This impact is within the scope of the PEIR because the proposed activities, as well as the associated equipment and duration of use, and the intent of the treatments to reduce wildfire risk and GHG emissions related to wildfire are consistent with those analyzed in the PEIR. Mitigation Measure GHG-2 would be implemented by using air curtain burners when feasible to reduce GHG emissions associated with pile burning. Although use of an air curtain burner would substantially reduce GHG emissions, emissions generated by the treatment would still contribute to the annual emissions generated by the CalVTP, and this impact would remain significant and unavoidable, consistent with, and for the same reasons described in, the PEIR. SPR AQ-3 is also applicable to this treatment and will contain the description of feasible GHG reduction techniques implemented per Mitigation Measure GHG-2.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the climate conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the GHG impact would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would be a change to the project analyzed in the PEIR. Burn plans prepared by the League would include smoke management plans that would meet the same standards as required for CAL FIRE burn plans. For this reason, proposed revisions to SPR AQ-3 would not result in greater generation of GHG emissions, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect from GHG emissions than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). This determination 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 consistent with the treatment types and activities considered in the CaIVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.8.1, "Regulatory Setting," and Section 3.8.2, "Environmental Setting," in Volume II of the Final PEIR). Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions pertinent to the climate conditions that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. Revisions to SPR AQ-3 would constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS). The USFS burn plan template requires the same standards for air quality as the CAL FIRE template, which was considered in the PEIR; therefore, revisions to SPR AQ-3 would not result in a new impact that was not covered in the PEIR. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to GHG emissions are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and the inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to GHG emissions would occur.

## 4.8 ENERGY RESOURCES

Impact i	n the PEIR			Pr	oject-Sp	ecific Che	cklist	
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	Identify Impact Significand for Treatmer Project	t 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
Notes: LTS = less than significant	;; NA = not ap	plicable because	e there are no	SPRs and/or N	/Ms identifi	ed in the PEI	R for this impact.	
New Energy Resource Impacts: to energy resources that are no	Would the tre t evaluated in	atment result in the CalVTP PEIF	other impact ??	S Yes		No	If yes, complete ro and discuss	w(s) below ion

to energy resources that are not evaluated in the CalVTP PEIR?				-	and	discussion
		Pc Się	otentially gnificant	Le Sign M Inco	ess Than ificant with itigation orporated	Less than Significant
Completion of this row is not applicable because there would be no new imp	acts.					

### Discussion

#### IMPACT ENG-1

Use of vehicles and mechanical equipment during initial treatment and treatment maintenance activities would result in the consumption of energy through the use of fossil fuels. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The use of fossil fuels for equipment and vehicles was examined in the PEIR. The consumption of energy during implementation of the treatment project 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. The inclusion of land in the proposed project area that is outside the CaIVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the existing energy consumption is essentially the same within and outside the treatable landscape; therefore, the energy impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and for similar durations of time. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

#### NEW ENERGY RESOURCE IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatment project are consistent with the applicable regulatory and environmental conditions presented in the CalVTP PEIR (refer to Section 3.9.1, "Regulatory Setting," and Section 3.9.2, "Environmental Setting," in Volume II of the Final PEIR). Including land outside the treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the effects of road decommissioning pertinent to energy resources are essentially the same as the effects of road decommissioning pertinent to energy resources are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts of the proposed treatment project are also consistent with those considered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and the inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to energy resources would occur.

### 4.9 HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

Impact i	n the PEIR			Project-Specific Checklist						
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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 through HAZ-9	NA	LTS	No	Yes		
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	LTSM	Impact HAZ- 3, pp. 3.10-18 – 3.10-19	Yes	NA	HAZ-3	LTS	No	Yes		

Notes: LTS = less than significant; LTSM = less than significant with mitigation; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Hazardous Materials, Public Health and Safety Impacts:</b> 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 No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

### Discussion

#### IMPACT HAZ-1

Initial and maintenance treatments would include mechanical treatments, manual treatments, and prescribed burning. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). These treatment activities would require the use of fuels and related accelerants, which are hazardous materials. The potential for treatment activities to cause a significant health hazard from the use of hazardous materials was examined in the PEIR. This impact is within the scope of the PEIR because the types of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the exposure potential and regulatory conditions are essentially the same within and outside the treatable landscape; therefore, the hazardous material impact would also be the same, as described above. SPR HAZ-1 is applicable to this treatment. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The proposed project includes a revision to SPR HYD-2 for road maintenance and repair that were not analyzed in the PEIR. Additionally, road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The mechanical equipment used to implement these activities has the potential to spill oil, gasoline, and lubricants. SPR HAZ-1 would be implemented during treatment activities, road maintenance and repair, and road decommissioning, which requires that all equipment be properly maintained per manufacturer's specifications, requires regular inspection of all equipment for leaks, and requires that any equipment found leaking is required to be promptly removed from a treatment site. This SPR would minimize leaks and the potential for resultant contamination to enter the environment. Furthermore, several federal and state laws regulate the use, transport, storage, and disposal of hazardous materials, including the HWCA, DTSC's Unified Program, and OSHA and EPA regulations. Because the activities where hazardous fluids could be spilled would be temporary, would have a similar impact as previously analyzed mechanical treatment activities, and the SPR listed would be implemented, the proposed revision to SPR HYD-2 for road repair as well as the addition of road decommissioning would not result in any substantially more severe impacts on the environment as evaluated in the PEIR.

#### IMPACT HAZ-2

Initial and maintenance treatments would include the application of herbicides using ground-based methods, such as using a backpack sprayer or painting herbicide onto cut stems. No aerial spraying of herbicides would occur. The potential for treatment activities to cause a significant health hazard from the use of herbicides was examined in the PEIR. This impact is within the scope of the PEIR because the types of herbicides (i.e., glyphosate) and application methods that would be used, which are limited to ground-based applications, are consistent with those analyzed in the PEIR. In addition, herbicides would be applied by licensed applicators in compliance with all laws, regulations, and herbicide label instructions, consistent with herbicide use described in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the exposure potential is essentially the same within and outside the treatable landscape; therefore, the hazardous materials impact would be also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, road decommissioning would not include the use of herbicides; thus, this proposed activity would not result in creating a significant health hazard from the use of herbicides. SPRs HAZ-5 through HAZ-9 are applicable to herbicide application included in the proposed project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

### IMPACT HAZ-3

Initial and maintenance treatments would include soil disturbance and prescribed burning, which could expose workers or the environment to hazardous materials if a contaminated site is present within the project area. The potential for workers implementing treatment activities to encounter contamination that could expose them or the environment to hazardous materials was examined in the PEIR. This impact was identified as potentially significant in the PEIR because hazardous materials sites could be present within treatment sites, and soil disturbance or burning in those areas could expose people or the environment to hazards. As directed by Mitigation Measure HAZ-3, database searches for hazardous materials sites within the project area have been conducted, and no hazardous materials sites were identified within 0.25 mile of the project area (DTSC 2022; CalEPA 2022; SWRCB 2022) (see Attachment C). Therefore, this impact would be less than significant. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the potential to encounter hazardous materials and the regulatory conditions present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the hazardous materials impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR.

However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because they would involve similar types of soil disturbance as a result of the use of similar types of heavy equipment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) such that workers or the environment could be exposed to hazardous materials if a contaminated site is present within the project area. No SPRs are applicable to this impact, and no additional mitigation is required. This determination 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 consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.10.1, "Environmental Setting," and Section 3.10.2, "Regulatory Setting," in Volume II of the Final PEIR). Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to hazardous materials that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to hazardous materials are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, a revision to SPR HYD-2, and the inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to hazardous materials, public health, or safety would occur.

# 4.10 HYDROLOGY AND WATER QUALITY

Impact i	n the PEIR			P	roject-Spe	ecific Check	list	
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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	Yes	HYD-1 HYD-4 HYD-6 BIO-4 GEO-4 GEO-6 AQ-3	NA	LTS	No	Yes
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 through GEO-5 GEO-7 GEO-8 BIO-1 BIO-4 BIO-5 HAZ-1 HAZ-5	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 BIO-4 HAZ-5 HAZ-7	NA	LTS	No	Yes

(Project ID: 2022-27) 4-54 Sierra Nevada Conservancy and Save the Redwoods League Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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?
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 through GEO-5 GEO-7 GEO-8	NA	LTS	No	Yes

<b>New Hydrology and Water Quality Impacts:</b> Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CaIVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

### Discussion

The project area is located on the western slope of the Sierra Nevada and drains west into the Central Valley between Terra Bella and Porterville, and within the Upper Deer Creek Watershed. The morphology of the drainage basin ranges from deep, V-shaped canyons with steep, rugged terrain to moderate slopes at lower elevations. The watershed encompasses approximately 65,340 acres (USDA 2012). Hydrologic features in the project vicinity include Alder Creek, South Alder Creek, Poppy Lake, which is a human-made lake. The lake is frequented by community members from Sequoia Crest and surrounding communities, and the water is used to supply the community of Sequoia Crest. Slopes within the project area drain into Alder Creek.

Several of the impacts below (i.e., Impact HYD-1 through HYD-4) evaluate compliance with water quality standards or waste discharge requirements. All include implementation of SPR HYD-1, which requires compliance with such water guality regulations. The State Water Resources Control Board is requiring all projects using the CalVTP PEIR to follow the requirements of their Vegetation Treatment General Order, which would meet the requirements of SPR HYD-1. 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 PEIR. In addition, the General Order requires compliance with any applicable Basin Plan prohibitions.

#### **IMPACT HYD-1**

Initial and maintenance treatments would include prescribed burning. Ash and debris from treatment areas could be washed by runoff into adjacent drainages and streams. Although most treatment areas would avoid streams and watercourses, WLPZs ranging from 50 to 150 feet will be implemented for Class I and Class II streams that are within treatment areas pursuant to SPR HYD-4. The potential for prescribed burning activities to cause runoff and violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the

PEIR because the use of low-intensity prescribed burns and associated impacts to water quality are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from prescribed burning would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would be a change to the project analyzed in the PEIR. Burn plans prepared by the League would include elements that would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3. For this reason, proposed revisions to SPR AQ-3 would not 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. Therefore, revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect on hydrology and water quality than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning on water quality are essentially the same as the effects of mechanical treatment activities included in the PEIR because they would use the same types of heavy equipment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and would not include any additional prescribed burning; thus, road decommissioning would not result in any impacts related to violation of water quality standards or waste discharge requirements, discharge requirements, substantially degrade surface or ground water quality, or conflict with or obstruct the implementation of a water quality control plan as it relates to prescribed burning. SPRs applicable to this treatment are HYD-1, HYD-4, HYD-6, BIO-4, GEO-6, and AQ-3. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### IMPACT HYD-2

Initial treatment would include mechanical and manual treatments. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Although most treatment areas would avoid streams and watercourses, WLPZs ranging from 50 to 150 feet would be implemented for any watercourses that are within treatment areas pursuant to SPR HYD-4. The potential for mechanical and manual treatment activities to violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the use of heavy equipment and hand-held tools to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR. The inclusion of land in the project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from manual and mechanical treatments is also the same, as described above. SPRs applicable to this treatment are HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-5, GEO-7, GEO-8, BIO-1, BIO-4, BIO-5, HAZ-1, and HAZ-5. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The proposed project includes a revision to SPR HYD-2 to allow road maintenance and repair and the addition of road decommissioning activities, as described in Sections 1.1.3, 2.2.3, and 2.2.4 and in Impacts GEO-1 and GEO-2. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. These activities could degrade water quality. Water quality impacts could occur during road repair activities and would result in a permanent reduction in the potential for water quality impacts through repair and maintenance of the roads. Some of the existing roads in the project area need maintenance to improve drivability, to reduce the potential for erosion, and to serve as non-shaded fuel breaks in the project area. The project would include

resurfacing of 0.04 linear mile of road with gravel and minor repair along 5.7 miles of existing unpaved roads. The equipment used to repair and maintain the roads would be similar to the equipment used for mechanical treatment activities to implement non-shaded fuel breaks (e.g., wheeled tractors, crawler-type tractors, or dozers, or front-end loaders). SPRs HYD-1, HYD-4, HYD-6, GEO-1 through GEO-5, GEO-7, GEO-8, BIO-4, and HAZ-1 would be implemented to reduce the potential for water quality impacts during construction. Because the activities would be temporary, would result in improved water quality, would have a similar impact as previously analyzed in the PEIR for mechanical treatment activities because the same types of equipment would be used during road repair and road maintenance activities (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport), and the SPRs listed would be implemented, the revisions to SPR HYD-2 would not result in any substantially more severe impacts on water quality than what was covered in the PEIR.

Some existing roads and skid trails would not be required to implement treatments or maintenance activities proposed under this project and would not be useful as fuel breaks are proposed for decommissioning. Decommissioning is proposed for 100-150 feet of roads and skid trails within the project area. Road decommissioning would not occur on slopes over 50 percent. The equipment that would be used to decommission the roads and skid trails would be similar to the equipment that would be used for mechanical treatment activities analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs HYD-1, HYD-4, HYD-6, GEO-1 through GEO-5, GEO-7, GEO-8, BIO-4, and HAZ-1 would be implemented to reduce the risk of water quality impacts during decommissioning. Because the activities would occur one time and would be temporary, would result in improved long term water quality, would have a similar impact as previously analyzed in the PEIR for mechanical treatment activities because the same types of heavy equipment would be used, and the SPRs listed above to reduce or avoid water quality impacts would be implemented, the addition of road and skid trail decommissioning would not result in any substantially more severe impacts to water quality than what was covered in the PEIR.

#### IMPACT HYD-3

This impact does not apply to the proposed project because prescribed herbivory is not a proposed treatment activity.

#### IMPACT HYD-4

Initial and maintenance treatments would include the use of herbicides to manage resprouting native tree species (e.g., white fir, incense cedar) within the treatment area. Herbicide application would be limited to ground-based methods, such as a using targeted spray from a backpack or reservoir carried by a utility terrain vehicle (UTV), or painting herbicide onto cut stems. All herbicide application would comply with EPA and California Department of Pesticide Regulation label standards. The potential for the use of herbicides to violate water quality regulations or degrade water quality was examined in the PEIR. This impact is within the scope of the PEIR because the use of herbicides to remove vegetation and associated impacts to water quality are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, surface water conditions are essentially the same within and outside the treatable landscape; therefore, the water quality impact from use of herbicides is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, road decommissioning would not include the use of herbicides; thus, road decommissioning would not result in any impacts related to violation of water guality standards or waste discharge requirements, discharge requirements, substantially degrade surface or ground water quality, or conflict with or obstruct the implementation of a water quality control plan as it relates to ground application of herbicides. SPRs applicable to this treatment are HYD-1, HYD-5, BIO-4, HAZ-5, and HAZ-7. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

Initial and maintenance treatments could cause ground disturbance and erosion, which could directly or indirectly modify existing drainage patterns. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for treatment activities to substantially alter the existing drainage pattern of a project area was examined in the PEIR. This impact to site drainage is within the scope of the PEIR because the types of treatments and treatment intensity are consistent with those analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, surface water conditions are essentially the same within and outside the treatable landscape; therefore, the impact related to alteration of site drainage patterns is also the same, as described above. SPRs applicable to this treatment are HYD-2, HYD-4, HYD-6, GEO-1, GEO-2, GEO-4, GEO-5, GEO-7. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

The proposed project includes a revision to SPR HYD-2 to allow road maintenance and repair as well as the addition of road decommissioning activities, as described in Sections 1.1.3, 2.2.3, and 2.2.4. Drainage patterns would be permanently improved through these activities by improving road conditions and decommissioning roads. The existing roads in the project area need maintenance to improve drivability, to reduce the potential for erosion, and to serve as fuel breaks in the project area. The project would include resurfacing of 0.04 linear mile of road with gravel and minor repair along 5.7 miles of existing unpaved roads. The equipment used to repair and maintain the roads would be similar to the equipment used for mechanical treatment activities to construct non-shaded fuel breaks. SPRs HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-5, GEO-7, and GEO-8 would be implemented to reduce the impacts to drainageways. Because the activities would be temporary, would result in improved long term drainage conditions by maintaining roads, would have a similar impact as previously analyzed in the PEIR for mechanical treatment activities, and the SPRs listed would be implemented, the revision of SPR HYD-2 would not result in any substantially more severe impacts on drainage patterns than what was covered in the PEIR.

Roads and skid trails decommissioning is proposed for 100-150 feet of roads and skid trails. Road decommissioning would not occur on slopes over 50 percent. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. The equipment that would be used to decommission the roads and skid trails would be similar to the equipment that would be used for mechanical treatment activities analyzed in the PEIR for the construction of non-shaded fuel breaks. SPRs HYD-1, HYD-2, HYD-4, HYD-6, GEO-1 through GEO-5, GEO-7, and GEO-8 would be implemented to reduce impacts to drainage patterns. Because the activities are temporary, would result in improved long term drainage conditions, would have a similar impact as previously analyzed in the PEIR for mechanical treatment activities, and the SPRs listed would be implemented, the addition of road and skid trail decommissioning activities would not result in any substantially more severe impacts on drainage patterns than what was covered in the PEIR.

#### NEW HYDROLOGY AND WATER QUALITY IMPACTS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatment project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.11.1, "Environmental Setting," and Section 3.11.2, "Regulatory Setting," in Volume II of the Final PEIR). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to hydrology and water quality that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project area also consistent with those covered in the PEIR. Revisions to SPR AQ-3 constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS). The USFS burn plan template would include elements that would minimize soil burn severity to reduce the potential for

runoff and soil erosion, as outlined in SPR AQ-3 and analyzed in the PEIR; therefore, revisions to SPR AQ-3, would not result in a new impact that was not covered in the PEIR. The change to SPR HYD-2 is necessary to implement the project and impacts resulting from proposed revisions to the SPR are consistent with the impacts analyzed in the program, as explained under relevant impacts above. The additional activities proposed, road maintenance and road decommissioning, reduce the long-term risk of water quality and drainage impacts and are not substantially different than what was analyzed in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, the revision of SPR AQ-3, revision of SPR HYD-2, and the addition of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to hydrology and water quality would occur.

# 4.11 LAND USE AND PLANNING, POPULATION AND HOUSING

Impact i	n the PEIR			Pi	roject-Spe	ecific Check	list	
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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	NA	LTS	No	Yes
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15	Yes	NA	NA	LTS	No	Yes
Notes: LTS = less than significant	; NA = not ap	plicable because	e there are no	SPRs and/or N	MMs identifie	ed in the PEIR f	or this impact.	
New Land Use and Planning, Population and Housing Impacts: W treatment result in other impacts to land use and planning, popul housing that are not evaluated in the CalVTP PEIR?		s: Would the opulation and	d Yes		No No		olete row(s) discussion	
					ntially Less Than Significant with		with Less than	Significant

## Discussion

impacts.

Completion of this row is not applicable because there would be no new

#### IMPACT LU-1

Initial treatment and treatment maintenance activities would occur on property owned by the League. As noted in Section 4.12, "Noise," below, treatment activities would take place during daytime hours consistent with the Tulare County General Plan. While there would be the potential for some prescribed burning to occur during nighttime and weekend hours, all treatment activities using equipment would be typically be limited to 7:00 a.m. to 7:00 p.m., Monday through Saturday (Policy HS-8.18). No construction would occur on Sundays or national holidays without a permit from Tulare County to minimize noise impacts associated with development near sensitive receptors. In addition, treatments are not proposed on Saturdays. This would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. The potential for vegetation treatment activities to cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation was examined in the PEIR. This impact is within the scope of the PEIR because the treatment types and activities are consistent with those analyzed in the PEIR. No conflict would occur because the League would adhere to SPR AD-3. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent considered in the PEIR. However, land uses in the project area are essentially the same within and outside the treatable landscape; therefore, the land use impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because those activities would also occur on the League's property, would

entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport), and would be implemented between 7:00 a.m. and 7:00 p.m., Monday through Saturday This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

#### IMPACT LU-2

The potential for initial treatments and maintenance treatments to result in substantial unplanned population growth as a result of increases in demand for employees was examined in the PEIR. Impacts associated with short-term increases in the demand for workers during implementation of the treatment project are within the scope of the PEIR because the number of workers required for implementation of the treatments is consistent with the crew size analyzed in the PEIR for the types of treatments proposed (i.e., 10–50 workers for prescribed burns, one to 50 crew members, and up to four crews for mechanical and manual treatments, and up to 10 workers for herbicide treatments). In addition, the proposed project would not require the hiring of new employees. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the population and housing characteristics of the project area are essentially the same within and outside the treatable landscape; therefore, the population and housing impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because similar sized crews would be utilized to operate the same types of equipment that would be used during mechanical treatment. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

#### NEW LAND USE AND PLANNING, POPULATION AND HOUSING IMPACTS

The proposed project is consistent with the treatment types and activities considered in the CalVTP PEIR. The sitespecific characteristics of the proposed treatment project are consistent with the applicable environmental and regulatory conditions presented in the CalVTP PEIR (refer to Section 3.12.1, "Environmental Setting," and Section 3.12.2, "Regulatory Setting," in Volume II of the Final PEIR). Including land in the proposed project area that is outside the treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing conditions that are pertinent to land use and planning, population and housing that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to land use and planning, population and housing are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and road maintenance and decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to land use and planning, population and housing would occur.

### 4.12 NOISE

Impact i	n the PEIR			Project-Specific Checklist					
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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 through NOI-6	NA	LTS	No	Yes	
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated Single-Event Noise Levels During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12	Yes	NOI-1	NA	LTS	No	Yes	
Notes: LTS = less than significant	;; NA = not ap	plicable because	e there are no	SPRs and/or N	/Ms identifie	ed in the PEIR f	or this impact.		
<b>New Noise Impacts:</b> Would the impacts that are not evaluated i	treatment res n the CalVTP	ult in other nois PEIR?	e-related	Yes		No No	If yes, comp below and	olete row(s) discussion	
				Potentiall Significar	y Less Th nt Mitiga	an Significant v tion Incorporat	with Less than s red	Significant	
Completion of this row is not ap impacts.	plicable beca	use there would	l be no new						

## Discussion

#### IMPACT NOI-1

Initial and maintenance treatments would require heavy, noise-generating equipment. Manual treatment, mechanical treatment, and prescribed burning occurring adjacent to sensitive land uses could temporarily expose those receptors to noise levels that exceed local standards. Herbicide application would not require the use of noise-intensive equipment; noise generated by this treatment type would be negligible. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for a substantial short-term increase in ambient noise levels from use of heavy equipment was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed, and equipment use being temporary and sporadic, are consistent with the assumptions analyzed in the PEIR. The proposed treatments would not require the use of helicopters, which was the loudest type of equipment evaluated in the PEIR.

The Tulare County General Plan restricts noise-generating activity, which includes construction equipment, between the hours of 7:00 p.m. and 7:00 a.m. (Policy HS-8.18). Additionally, the County's land use/noise compatibility standards would be applied such that (Policy HS-8.12) (Tulare County 2012):

the hourly Leq resulting from the development or new noise-sensitive land uses or new noise-generating sources shall not exceed 50 dB during the day (7:00 a.m.-10:00 p.m.) or 40 dB during the night (10:00 p.m.-7:00 a.m.) when measured at the boundary of areas containing or planned and zoned for residential or other noise-

sensitive land uses. For these same areas and under the same circumstances, the maximum A-weighed noise level (Lmax) shall not exceed 70 dB during the day or 60 dB during the night.

The County's land use/noise compatibility interior standards limit interior noise to 45 dB Ldn for noise sensitive receptors (Policy HS-8.5) (Tulare County 2012). Ldn is the day-night average sound level and is used to describe the cumulative noise exposure during an average annual day. As discussed in the PEIR, noise levels generated by individual equipment range from 75 to 87.9 dB at 50 feet from the noise source (75 to 85 dB at 50 feet from the noise source for projects without the use of helicopters). The loudest types of equipment proposed for this project are chainsaws and dozers. Though multiple pieces of equipment would be operated simultaneously to implement a treatment, they would typically be spread out (i.e., usually more than 100 feet apart) rather than operating next to each other. This is particularly true of larger, heavy-duty off-road equipment such as chippers and dozers. Noise-generating equipment would be used intermittently between 7:00 a.m. and 7:00 p.m. during treatment. While there is the potential for some prescribed burning to occur during nighttime and weekend hours, all treatment activities using noise-generating equipment would be limited to 7:00 a.m. to 7:00 p.m. Monday through Friday, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. Furthermore, the proposed project would not operate equipment during these noise-sensitive hours that would exceed the noise standards included in the General Plan summarized above.

Although operation of equipment would temporarily and intermittently generate elevated noise during daytime hours, the interior noise standard is an average that considers daytime and nighttime noise levels, and when averaged with the noise levels during the quiet nighttime hours, it is reasonably expected that noise generated during treatments would not exceed the local Ldn threshold. In addition, treatments would only occur outside of the 100-foot defensible space requirement described in PRC 4291 and therefore, would not occur within 100 feet of sensitive receptors. The equipment noise levels discussed above are at 50 feet from the noise source. Therefore, there would be additional attenuation for distance, vegetation, and building materials that would result in interior noise levels being lower than the 77 to 85 dB levels estimated for equipment. Treatments would also be dispersed throughout the 530-acre project area so that shortterm noise increases at any one sensitive receptor would be limited. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the exposure potential to any sensitive receptors present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the noise impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and for similar durations of time with similar hours of operation. SPRs AD-3 and NOI-1 through NOI-5 are applicable to this treatment. With implementation of SPR AD-3, noise levels associated with vegetation treatment activities under the CalVTP would not exceed local land use/noise compatibility standards and noise exposure attributed to vegetation treatment activities under the CalVTP would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of local standards. For any sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) that are within 1,500 feet of a treatment area, SPR NOI-6 would also apply. The residences of the community of Seguoia Crest are located immediately east of the project area that could be within 1,500 feet of proposed treatments. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### **IMPACT NOI-2**

Initial and maintenance treatments would involve large trucks hauling heavy equipment to the project area. These haul truck trips would be dispersed on area roadways providing access to the project area including SR 190, Redwood Drive, Ponderosa Drive, Chinquapin Drive, Alder Drive, and Cedar Drive. Vehicle traffic on area highways is not expected to generate a noticeable increase in traffic-related noise. Haul truck trips on the local roadways would pass by residential receptors and the event of each truck passing by could increase the single event noise levels (SENL). The potential for a substantial short-term increase in Single-Event Noise Levels was examined in the PEIR. 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 treatment would occur during daytime hours, which would avoid the potential to cause sleep disturbance to residents during the more noise-sensitive evening and nighttime hours. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the exposure potential is essentially the same within and outside the treatable landscape; therefore, the noise impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) that would require similar transport to and from the project area that could result in similar shore-term truck-generated single-event noise levels. SPR NOI-1 would be applicable to this treatment. This determination 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 consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to noise that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to noise are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and road maintenance and decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to noise would occur.

### 4.13 RECREATION

Impact i	n the PEIR		Project-Specific Checklist					
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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	REC-1	NA	LTS	No	Yes

Notes: LTS = less than significant NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Recreation Impacts:</b> Would the treatment result in other impacts to recreation that are not evaluated in the CaIVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

### Discussion

Recreation areas and trails are present in and around the project area within the Sequoia National Forest. The property is surrounded almost entirely by the Giant Sequoia National Monument, administered by the Sequoia National Forest. Recreational opportunities in the surrounding area include camping, hiking, fishing, wildlife viewing, and biking. The Alder Creek property is located approximately 3 miles north of Camp Nelson and the Camp Nelson Trail, and 7 miles north of Slate Mountain. Other recreational facilities in the project vicinity include the Summit Trail, Maggie Lakes Loop, Wishon Campground, and Balch Park.

The recreation resources present within the Alder Creek property include a trail to the Stagg Tree. The trail to the Stagg Tree is open to the public by walking only and no public camping is permitted. The property has been open for public visitation for several decades with thousands of visitors every year and has become one of the most visited sites in the area. Visitation occurs during all months of the year, including snowshoe and skiing visitors in the winter. The property also contains a human-made lake, Poppy Lake, which is frequented by members of the Sequoia Crest community and other nearby communities.

#### **IMPACT REC-1**

Vegetation treatment activities have the potential to disrupt recreational activities within the project area through temporary trail closures during active treatments and by degrading the experience of recreationists through the creation of noise, dust, degradation of scenic views, or increased traffic. The 2020 Castle Fire burned much of the project area and surrounding open space and likely degraded recreational opportunities in the area, although did not burn the Stagg Tree or trail to it. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for vegetation treatment activities to disrupt recreation activities was examined in the PEIR. This impact is within the scope of the PEIR because the number and types of equipment proposed and the duration and types of treatments are consistent with those analyzed in the

PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the availability of recreational resources within the project area is essentially the same within and outside the treatable landscape; therefore, the impact on recreation is also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport), which would temporarily limit access to recreation resources in active work areas. The SPR applicable to this treatment is REC-1. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than covered in the PEIR.

#### NEW RECREATION IMPACTS

The proposed project is consistent with the treatment types and activities considered in the CalVTP PEIR. The sitespecific characteristics of the proposed treatment project 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). Including land in the proposed project area that is outside the treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental conditions pertinent to recreation that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to recreation are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and road maintenance and decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to recreation would occur.

### 4.14 TRANSPORTATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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:	<u>.</u>	<u>.</u>			<u>.</u>		<u>.</u>	
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	Impact TRAN- 1, pp. 3.15-9 – 3.15-10	Yes	AD-3 TRAN-1	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 HYD-2 TRAN-1	NA	LTS	No	Yes
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	SU	Impact TRAN- 3, pp. 3.15-11 – 3.15-13	Yes	NA	AQ-1	SU	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Transportation Impacts:</b> Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

## Discussion

#### IMPACT TRAN-1

Initial and maintenance treatments would temporarily increase vehicular traffic along several roads in the project area, including SR 190, Redwood Drive, Ponderosa Drive, Chinquapin Drive, Alder Drive, Fox Farm Road, and Cedar Drive. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as identified for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for a temporary increase in traffic to conflict with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures was examined in the PEIR. The proposed treatments would be short term, and temporary increases in traffic related to treatments are within the scope of the PEIR because the treatment duration, limited number of vehicles, and types of vehicles (i.e., heavy equipment transport, crew vehicles for crew members) associated with the proposed treatments are consistent with those analyzed in the PEIR. In addition, the proposed treatments would not all occur concurrently, and increases in vehicle trips associated with the treatments would be dispersed on multiple roadways. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the

boundary of the project area, the existing transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and would include similar types of heavy equipment vehicle trips to haul equipment and materials, and trips associated with the workers commuting to and from the treatment areas. SPRs applicable to this treatment are AD-3 and TRAN-1. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### IMPACT TRAN-2

The proposed treatments would include prescribed burning, which would produce smoke and could potentially affect visibility along nearby roadways such that a transportation hazard could occur. The potential for smoke to affect visibility along roadways during implementation of the treatment project was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR because the burn duration is consistent with that analyzed in the PEIR.

The proposed project includes a revision to SPR HYD-2 to allow road maintenance and repair as well as the addition of road decommissioning activities, as described under Section 1.1.3, "Purpose of the PSA/Addendum," and under Impact HYD-2. As detailed in the "Road Repair" section of Section 2, "Treatment Description," existing dirt roads damaged during the 2020 Castle Fire would be repaired and maintained to facilitate evacuation and access during a wildfire, to allow access for vegetation treatments in the previously burned area, and to minimize erosion impacts. The road resurfacing and repair associated with the project would require up to two workers, occur over a period of approximately 5 weeks, and result in temporary partial and/or complete closure of the affected private roadways; and thus, would result in temporary obstructions and delays. The road repair activities would result in improvements to the conditions of the roads resulting in reducing existing roadway hazards. Therefore, the revision of SPR HYD-2 to allow road repairs would not result in a substantially more severe significant transportation hazard due to a design feature or incompatible use than what was identified in the CalVTP PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing transportation conditions (e.g., roadways and road use) present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities included in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) and would not include prescribed burning; thus, road decommissioning would not substantially increase hazards due to a design feature or incompatible uses. Because these existing roads and skid trails proposed for decommissioning are not currently used or anticipated to be used by the vegetation treatments, this proposed activity would not cause an increase in road hazards due to a design feature or incompatible use. SPRs applicable to this treatment are AD-3, HYD-2, and TRAN-1. As explained above, impacts on transportation hazards resulting from the proposed project, including proposed revisions to SPR HYD-2 and the addition of road decommissioning, would not constitute a substantially more severe impact than what was covered in the PEIR. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### IMPACT TRAN-3

Treatments could 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 areas. Proposed road

decommissioning activities would entail the use of and transport to the project area of some of the same heavy equipment as identified for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). This impact was identified as potentially significant and unavoidable in the PEIR because implementation of the CalVTP would result in a net increase in VMT. Manual and mechanical treatments and prescribed burning under the proposed project would typically require between two and 50 crew members with approximately two to 10 crews for mechanical and manual treatment type, up to five workers for herbicide treatments, and 10 to 50 workers for prescribed burning. The potential for an increase in VMT on affected roadways during implementation of the treatment project was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR because the size and number of crews is consistent with that analyzed in the PEIR. The increase in vehicle trips would be temporary and dispersed over multiple roadways. 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. As discussed under Impact AQ-1 in Section 4.3, "Air Quality," the League would implement Mitigation Measure AQ-1 to the extent feasible. While carpooling would be encouraged under Mitigation Measure AQ-1, crew sizes would be small and may not all be employed with the same company. Therefore, carpooling may not be feasible to implement for most of the workers. With implementation of Mitigation Measure AQ-1, and the current practice of employing local crews and equipment as available and feasible, it would not be feasible to reduce VMT generated under the proposed project beyond encouraging workers to carpool. The proposed project would contribute to the cumulative increase in VMT attributable to implementation of the CalVTP. For these reasons, and as explained in the PEIR, this impact would remain significant and unavoidable. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the transportation-related conditions in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the transportation impact would also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities included in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) that would also require transport to and from the project 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.

#### NEW IMPACTS ON TRANSPORTATION

The proposed treatments are consistent with the treatment types and activities considered in the CaIVTP PEIR. The site-specific characteristics of the proposed treatments 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). Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR and revisions to SPR HYD-2 constitute a revision to the program. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to transportation that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to transportation are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. Impacts resulting from proposed revisions to SPR HYD-2 are consistent with the impacts analyzed in the program, as explained under the relevant impact above. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, the addition of road decommissioning activities, and the revision to SPR HYD-2 would not give rise to any new significant impacts. Therefore, no new impact related to transportation would occur.

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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 Impact UTIL-2: Generate Solid Waste	LTS SU	Impact UTIL-1, p. 3.16-9 Impact UTIL-2, pp.	Yes Yes	NA UTIL-1	NA	LTS	No	Yes Yes
in Excess of State Standards or Exceed Local Infrastructure Capacity		3.16-10 – 3.16-12						
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Impact UTIL-2, p. 3.16-12	Yes	UTIL-1	NA	LTS	No	Yes

Notes: LTS = less than significant; SU = significant and unavoidable; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.

<b>New Public Services, Utilities and Service System Impacts</b> : Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP PEIR?	Yes	No No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
Completion of this row is not applicable because there would be no new impacts.			

### Discussion

#### IMPACT UTIL-1

Initial and maintenance treatments would include prescribed burning, which would require an on-site water supply (water trucks) to be available as a safety precaution. If needed to extinguish the burn, water would be supplied from water trucks. The potential increased demand for water was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR because the size of the area proposed for prescribed burn treatments, amount of water required for prescribed burning, and water source type are consistent with those

analyzed in the PEIR. The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the water supplies present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the water supply impact would also be the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning on water supply are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because it would not generate any demand for water supply; thus, road decommissioning would not result in any impacts that would result in physical impacts associated with provision of water supplies, including related infrastructure needs. No SPRs are applicable to this impact. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

### IMPACT UTIL-2

Initial and maintenance treatments would generate biomass within the treatment areas. Biomass generated by mechanical and manual treatments would be disposed of with air curtain burning or pile burning or lopping and scattering biomass in areas where material cannot safely be burned. Invasive plant and noxious weed biomass would also be treated on-site (e.g., herbicide application), when possible, to eliminate seed and propagules; however, invasive plants and noxious weeds would not be chipped and spread, scattered, or mulched on-site. If invasive plant biomass cannot be treated on-site, there is the potential for a small amount to be disposed of off-site at an appropriate waste collection facility. This impact was identified as potentially significant and unavoidable in the PEIR because biomass hauled off-site could exceed the capacity of existing infrastructure for handling biomass. For the proposed treatment project, only 10 percent of the biomass would be hauled off-site. While the amount of biomass generated by the project is not expected to exceed the capacity of existing local infrastructure in Tulare County, it would contribute to the environmental significance conclusion in the PEIR; therefore, for purposes of CEQA compliance, this PSA/Addendum notes the impact as potentially significant and unavoidable. The inclusion of land in the proposed treatment area that is outside the CaIVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, conditions related to biomass in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts related to biomass are also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning would not be greater than the effects of mechanical treatment activities as analyzed in the PEIR because road decommissioning would not remove any biomass and any soils that would be removed would be retained on-site. SPR UTIL-1 would be applicable to the proposed treatments for biomass that would be hauled off-site. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### IMPACT UTIL-3

As discussed above, initial and maintenance treatments would generate biomass. Biomass generated by mechanical and manual treatments would be disposed of with air curtain burning or pile burning or lopping and scattering biomass in areas where material cannot safely be burned. Invasive plant and noxious weed biomass would also be treated on-site, when possible. If invasive plant biomass cannot be treated on-site, there is the potential for up to 10 percent to be disposed of off-site at an appropriate waste collection facility. If off-site disposal is needed, the League would comply with all federal, state, and local management and reduction goals, statutes, and regulations related to solid waste. Compliance with reduction goals, statutes, and regulations related to solid waste was examined in the PEIR. This impact is within the scope of the activities and impacts addressed in the PEIR. The inclusion of land in the proposed treatment area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the biomass conditions in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, impacts

related to biomass are also the same, as described above. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning would not be greater than the effects of mechanical treatment activities as analyzed in the PEIR because road decommissioning would not remove any biomass and any soils that would be removed as a result of road decommissioning would be retained on-site. SPR UTIL-1 would be applicable to the proposed treatments if biomass is hauled off-site. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### NEW IMPACTS ON PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

The proposed treatments are consistent with the treatment types and activities considered in the CalVTP PEIR. The site-specific characteristics of the proposed treatments are consistent with the applicable regulatory and environmental 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). Including land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to public services, utilities, and service systems that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape. The inclusion of road decommissioning is an additional activity that is outside the activities covered in the CalVTP PEIR and therefore constitutes a change to the PEIR. However, the effects of road decommissioning pertinent to public services, utilities, or service systems are essentially the same as the effects of mechanical treatment activities included in the PEIR. Therefore, the impacts are the same and, for the reasons described above, impacts of the proposed treatment project are also consistent with those covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape and the inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to public services, utilities, or service systems would occur.

### 4.16 WILDFIRE

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered in the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project	List MMs Applicable to the Treatment Project	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	Impact WIL-1, pp. 3.17-14 – 3.17-15	Yes	AD-3 AQ-3 HAZ-2 HAZ-3 HAZ-4	NA	LTS	No	Yes
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Postfire Flooding or Landslides	LTS	Impact WIL-2, pp. 3.17-15 – 3.17-16	Yes	AQ-3 GEO-3 GEO-4 GEO-5 GEO-8	NA	LTS	No	Yes
Notes: LTS = less than significant; NA = not applicable because there are no SPRs and/or MMs identified in the PEIR for this impact.								
<b>New Wildfire Impacts:</b> Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?			Yes		No No	If yes, com below and	olete row(s) discussion	
				Potential Significar	ly Less Th nt Mitiga	an Significant tion Incorpora	with Less than ted	Significant

# Discussion

impacts.

Completion of this row is not applicable because there would be no new

#### IMPACT WIL-1

Proposed vegetation treatment activities are mechanical, manual, herbicide application, and prescribed burn treatments. Vegetation treatment involving motorized equipment could pose a risk of accidental ignition. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). Temporary increases in risk associated with uncontrolled fire from prescribed burns could also occur. As discussed in Section 3.17.1, "Environmental Setting," in Volume II of the Final PEIR, under "Prescribed Burn Planning and Implementation," implementing a prescribed burn requires extensive planning, including the preparation of prescription burn plans, smoke management plans, site-specific weather forecasting, public notifications, safety considerations, and ultimately favorable weather conditions so a burn can occur on a given day. Prior to implementing a prescribed burn, fire containment lines would be established by clearing vegetation surrounding the designated burn area to help prevent the accidental escape of fire. Water containers and safety equipment would be staged on-site, as necessary.

The potential increase in exposure to wildfire during implementation of treatments was examined in the PEIR. Increased wildfire risk associated with the use of heavy equipment in vegetated areas and with prescribed burns is within the scope of the PEIR because the types of equipment, treatment duration, and the prescribed burn methods proposed as part of the project are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the wildfire risk is essentially the same within and outside the treatable landscape; therefore, the wildfire impact would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would constitute a change to the project analyzed in the PEIR. Burn plans prepared by the League would include a requirement to evaluate resistance to containment and measures to contain prescribed fire which are at least equivalent to that required under CAL FIRE burn plans. For this reason, proposed revisions to SPR AQ-3 would not substantially exacerbate fire risk and expose people to uncontrolled spread of a wildfire, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect related to risk of uncontrolled wildfire spread than what was covered in the PEIR.

Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). SPRs applicable to this treatment are AD-3, AQ-3, HAZ-2, HAZ-3, and HAZ-4. This impact of the proposed project is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

#### IMPACT WIL-2

Vegetation treatment types would include mechanical and manual vegetation treatment, herbicide application, and prescribed burning, which could exacerbate fire risk as described in Impact WIL-1 above. Proposed road decommissioning activities would entail the use of some of the same heavy equipment as for the mechanical treatment activities that were analyzed in the PEIR (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport). The potential for post-fire landslides and flooding was evaluated in the PEIR. The potential exposure of people or structures to post-fire landslides and flooding are within the scope of the activities and impacts covered in the PEIR because the equipment types, duration of treatments, and methods of prescribed burn implementation are consistent with those analyzed in the PEIR.

The inclusion of land in the proposed project area that is outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the wildfire risk of the project area is essentially the same within and outside the treatable landscape; therefore, the wildfire impact would also be the same, as described above.

The League proposes to revise requirements under SPR AQ-3 for prescribed burning activities to allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS), which would be a change to the project analyzed in the PEIR. Burn plans prepared by the League would include elements that would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3. For this reason, proposed revisions to SPR AQ-3 would not result in an increased risk of post-fire landslides and flooding, and revisions to SPR AQ-3, specifically for prescribed burning treatment activities, would not result in a substantially more severe significant effect related to post-fire landslide and flooding risk than what was covered in the PEIR.

As described in Section 1.1.3 and in Impact GEO-1, decommissioning is proposed for 100-150 feet of roads and skid trails. Road decommissioning would not occur on slopes over 50 percent. Road decommissioning is not an activity covered in the CalVTP PEIR; its inclusion would constitute a change to the PEIR. However, the effects of road decommissioning are essentially the same as the effects of mechanical treatment activities as analyzed in the PEIR because the same types of equipment would be used during treatment (e.g., wheeled tractors, skid steers, excavators, and dozers and dozer transport) that could cause similar ground disturbance. SPRs applicable to this impact are AQ-3, GEO-3 through GEO-5, and GEO-8. Although most mechanical treatments would occur from existing roads or skid trails or on flat to moderate slopes, SPR GEO-8 would apply if a treatment area contains steep slopes. Furthermore, because the treatments 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. 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 IMPACTS ON WILDFIRE

The proposed treatments are consistent with the treatment types and activities considered in the CaIVTP PEIR. The site-specific characteristics of the proposed treatment project 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). Including land from outside the CalVTP treatable landscape in the proposed project area constitutes a change to the geographic extent presented in the PEIR. However, within the boundary of the project area, the existing environmental and regulatory conditions pertinent to wildfire that are present in the areas outside the treatable landscape are essentially the same as those within the treatable landscape; therefore, the impacts of the proposed treatment project are also consistent with those covered in the PEIR. Revisions to SPR AQ-3 would constitute a change to the project analyzed in the PEIR. Revisions to SPR AQ-3 would allow for the use of non-CAL FIRE burn plan templates (e.g., burn plan templates recommended by USFS). The USFS burn plan template would include a requirement to evaluate resistance to containment and measures to contain prescribed fire which are at least equivalent to that required under CAL FIRE burn plans, and would also include elements that would minimize soil burn severity to reduce the potential for runoff and soil erosion, as outlined in SPR AQ-3 and analyzed in the PEIR; therefore, revisions to SPR AQ-3, would not result in a new impact that was not covered in the PEIR. No changed circumstances are present, and the inclusion of areas outside of the CalVTP treatable landscape, the revisions to SPR AQ-3, and inclusion of road decommissioning would not give rise to any new significant impacts. Therefore, no new impact related to wildfire would occur that is not covered in the PEIR.

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# 5 LIST OF PREPARERS

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# Attachment A

Mitigation Monitoring and Reporting Program for the Alder Creek Sequoia Resilience and Post-Fire Restoration Project

(CalVTP Project ID: 2022-27)

## MITIGATION MONITORING AND REPORTING PROGRAM

#### INTRODUCTION

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (Public Resources Code, Section 21081.6 and State CEQA Guidelines Sections 15091, subd. (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 Alder Creek Sequoia Resilience and Post-Fire Restoration Project (proposed project) because the Project-Specific Analysis/Addendum to the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR) (PSA/Addendum) 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 incorporated 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 environmental protection features of later activities consistent with the CalVTP PEIR.

#### 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 have been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, and the conditions and resources present within each treatment site. In addition, non-substantive clarifying edits to mitigation measures in the PEIR are shown in underline and strikethrough. In all cases, the 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 PEIR.

This MMRP will be adopted by the Sierra Nevada Conservancy (SNC) Governing Board with regard to its discretionary approval of the issuance of grant funding to implement portions of the proposed project. As this PSA/Addendum is used for CEQA compliance of future discretionary approvals by other state and local agencies related to treatments in the project area, those agencies will adopt separate MMRPs that specify the SPRs and mitigation measures relevant to their approval and within their jurisdiction.

#### ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, Save the Redwoods League (League) (the implementing entity) is responsible for implementing the SPRs and mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. As the CEQA lead agency, SNC will be responsible for ensuring that implementation of mitigation measures and SPRs related to its discretionary approval (i.e., for portions of the proposed project that are seeking funding from SNC) occurs in accordance with the MMRP pursuant to Section 15097(a) of the State CEQA Guidelines. The SNC Governing Board will approve the provision of grant funding to the League and delegate the implementation of the MMRP to the League.

The portion of the project that would be funded through future funding sources that have not yet been requested or obtained with the lead agency to be determined at a later time would be responsible for adopting the MMRP for that portion of the project. For this portion of the project, that agency will be responsible for ensuring that implementation of mitigation measures, as it relates to portions of the proposed project that are seeking funding from other sources, occurs in accordance with the MMRP pursuant to Section 15097(a) of the State CEQA Guidelines. As it relates to the portion of the proposed project receiving funding from other sources, the League would be responsible for implementing the SPRs and mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed.

As defined in the CalVTP PEIR and the PSA, the project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. The SPRs and mitigation measures in this MMRP direct the project proponent to implement actions to avoid, minimize and mitigate impacts. As the implementing entity and reflecting delegation by SNC, the "project proponent" as identified in the PSA/Addendum and this MMRP, including the SPRs and mitigation measures in the table below, refers to the League.

### REPORTING

Pursuant to State CEQA Guidelines Section 15097(a), for activities that would be seeking grant funding from SNC, SNC has delegated monitoring and reporting responsibilities to the League, who accepted this delegation. A similar approach to delegation of monitoring and reporting responsibilities to the League may occur for the portion of the project seeking funding from other sources. The League shall document and describe the compliance of the project treatment work with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report pursuant to the requirements of SPR AD-7, which shall also include submittal of SPR AD-7 documentation to SNC. The League shall submit updates on progress related to completion and implementation of SPRs and mitigation measures to SNC pursuant to SNC grant funding requirements.

#### MITIGATION MONITORING AND REPORTING PROGRAM TABLE

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

- SPRs and Mitigation Measures This column provides the text of the applicable SPR or adopted mitigation measure.
- ► Applicable to project components seeking SNC funding? This column identifies whether or not the project component seeking funding from SNC would be required to implement each SPR or mitigation measure.
- Applicable to project components funded by other sources? This column identifies whether or not the project component seeking funding from other sources would be required to implement each SPR or 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.

# QUALIFICATION REQUIREMENTS FOR BIOLOGICAL AND CULTURAL RESOURCE MEASURES

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

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

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

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

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

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

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Administrative Standard Project Requirements					
<b>SPR AD-1 Project Proponent Coordination:</b> For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: N Treatment Maintenance: N	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR AD-2 Delineate Protected Resources:</b> The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR AD-3 Consistency with Local Plans, Policies, and Ordinances</b> : The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR AD-4 Public Notifications for Prescribed Burning</b> : At least three days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	At least three days prior to prescribed burn activities	League	Portion of project seeking SNC funding: League

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and in all treatment types, including treatment maintenance.					Portion of project seeking funding from other sources: To be determined
SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on- site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR AD-6 Public Notifications for Treatment Projects.</b> One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	One to three days prior to the prescribed burn activities	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board of Forestry and Fire Protection (Board) or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to, during, and following treatment Information on the planned project (PSA and Addendum in	League	Portion of project seeking SNC funding: League

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
information available to the public via an online database or other mechanism.			progress) was submitted to the Board		Portion of project seeking funding from
Information on proposed projects (PSA in progress):			of Forestry and Fire		other sources:
<ul> <li>GIS data that include project location (as a point), or project latitude/longitude;</li> </ul>			Protection on September 15, 2022.		To be determined
<ul> <li>project size (typically acres);</li> </ul>					
<ul> <li>treatment types and activities; and</li> </ul>					
• contact information for a representative of the project proponent.					
The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public at least two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website). Information on approved projects (PSA complete):					
<ul> <li>A completed PSA Environmental Checklist;</li> </ul>					
<ul> <li>A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);</li> </ul>					
<ul> <li>GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction)</li> </ul>					
Information on completed projects (following initial treatment):					
<ul> <li>GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction)</li> </ul>					
<ul> <li>A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes</li> </ul>					
<ul> <li>Size of treated area (typically acres);</li> </ul>					
<ul> <li>Treatment types and activities;</li> </ul>					
<ul> <li>Dates of work;</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>A list of the SPRs and mitigation measures that were implemented</li> <li>Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b).</li> <li>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</li> </ul>					
Aesthetic and Visual Resource Standard Project Requirements	<u>I</u>		ł	L	<u></u>
<b>SPR AES-1 Vegetation Thinning and Edge Feathering:</b> The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR AES-3 Provide Vegetation Screening</b> : The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
					Portion of project seeking funding from other sources: To be determined
Air Quality Standard Project Requirements	ł	ł	1	L	
<b>SPR AQ-1 Comply with Air Quality Regulations:</b> 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.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR AQ-2 Submit Smoke Management Plan:</b> The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to prescribed burn treatment activities	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan when required by the San Joaquin Valley Air Pollution Control District or CAL FIRE using a template recommended by the US Forest Service that includes elements required to obtain burn permits, and any additional elements that are needed to using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior,	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to prescribed burn treatment activities; does not apply to pile burning	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent design a burn that will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. <u>This may,</u> but is not required to, include outputs from fire behavior modeling programs. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.					
<b>SPR AQ-4 Minimize Dust</b> : To minimize dust during treatment activities, the project proponent will implement the following measures:	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment	During treatment	League	Portion of project seeking SNC funding:
<ul> <li>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.</li> </ul>		Maintenance: Y			League Portion of project seeking funding from other sources:
► 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.					To be determined
<ul> <li>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.</li> <li>Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>(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.</li> <li>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</li> </ul>					
<b>SPR AQ-5 Avoid Naturally Occurring Asbestos:</b> The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (when required by 17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<ul> <li>Project-Specific Implementation</li> <li>Ground disturbing activities are considered to be: <ul> <li>Prescribed burning (containment lines);</li> <li>Pile burning;</li> <li>Road repair; and</li> <li>Mechanical treatments.</li> </ul> </li> <li>If avoidance is not feasible and disturbance of NOA containing areas is limited to one acre or less, the following would be required, per Asbestos Airborne Toxic Control Measure (17 CCR Section 93105): <ul> <li>Construction vehicle speed at the work site must be limited to 15 miles per hour or less;</li> <li>Prior to any ground disturbance, sufficient water must be applied to the area to be disturbed to prevent visible emissions from crossing the property line;</li> </ul> </li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>Areas to be graded or excavated must be kept adequately wetted to prevent visible emissions from crossing the property line;</li> <li>Storage piles (soil from road repair) must be kept adequately wetted, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile;</li> <li>Equipment must be washed down before moving from the property onto a paved public road; and</li> <li>Visible track-out on the paved public road must be cleaned using wet sweeping or a high efficiency particulate air (HEPA) filter equipped vacuum device within 24 hours.</li> <li>If avoidance is not feasible and disturbance of NOA containing areas is greater than one acre, the following would be required, per Asbestos Airborne Toxic Control Measure (17 CCR Section 93105):</li> <li>An Asbestos Dust Mitigation Plan for the operation will be:</li> <li>Submitted to and approved by the district before the start of any grading activity; and</li> </ul>					
• The provisions of that dust mitigation plan are implemented at the beginning and maintained throughout the duration of the grading activity.					
SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). A safety briefing will be conducted with all personnel resources on site for each operational period for all prescribed burning treatments to ensure personnel safety considerations and prescribed fire objectives. If deemed necessary by the Burn Boss or qualified technician, an Incident Action Plan (IAP) and associated maps will be prepared one day prior to ignition. IAP elements may include burn organization and assignments, prescribed fire objectives and prescription, description of the prescribed fire area, expected weather and fire behavior, communications, ignition plan, holding plan, contingency plan and assignments, wildfire declaration, and safety and medical plans. The IAP will include the burn dates; burn	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during prescribed burn treatment activities	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.					
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements					
<b>SPR CUL-1 Conduct Record Search:</b> An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment Record search of project area and 0.25- mile buffer surrounding project area has been conducted; see PSA/Addendum for a summary of results	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<ul> <li>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:</li> <li>A written description of the treatment location and boundaries.</li> <li>Brief narrative of the treatment objectives.</li> <li>A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.</li> <li>A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment Tribes have been contacted and Sacred Lands File query completed; see PSA/Addendum for a summary of consultation and SLF results.	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>A request for information regarding potential impacts to cultural resources from the proposed treatment.</li> <li>A detailed description of the depth of excavation, if ground disturbance is expected.</li> <li>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.</li> </ul>					
<b>SPR-CUL-3 Pre-field Research:</b> The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR CUL-4 Archaeological Surveys:</b> 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, which would be submitted to Southern San Joaquin Valley Information Center. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y	Prior to and during treatment	League	Portion of project seeking SNC funding:

Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.		Treatment Maintenance: Y			League Portion of project seeking funding from other sources: To be determined
<b>SPR CUL-6 Treatment of Tribal Cultural Resources:</b> The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR CUL-7 Avoid Built Historical Resources:</b> 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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources:

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					To be determined
<b>SPR CUL-8 Cultural Resource Training:</b> The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
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, 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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment Initial data review and reconnaissance-level survey have been conducted; see PSA/Addendum for summary of results.	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
(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:					
<ol> <li>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:         <ul> <li>a. by physically avoiding the suitable habitat, or</li> <li>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).</li> <li>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</li> </ul> </li> </ol>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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					
Project-Specific Implementation					
<ul> <li>Special-status plants</li> <li>To avoid impacts on the annual and perennial geophyte species identified in Table 4.5-2 of the PSA, non-ground-disturbing treatment activities (i.e., manual treatments, herbicide application, and prescribed burning) would be implemented only during the dormant season for these species (i.e., when the plant has no aboveground parts), which would typically occur after seed set and before germination, if feasible. Typically, germination will occur after the first significant rainfall (approximately 0.5 inches), and cold snap, which generally occurs between October – December (Levine et. al 2008). If the limited operating period for annual and perennial geophyte species (i.e., only non-ground-disturbing treatment activities conducted during the dormant season) is determined to be infeasible, then protocol-level surveys would be</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
required per SPR BIO-7. Note that ground-disturbing treatment activities (i.e., mechanical treatments) may result in impacts on these plant species even when dormant, and would not be conducted without prior implementation of SPR BIO-7).					
Special-status wildlife					
To avoid impacts on western pond turtle, a no-disturbance buffer of 1,500 feet would be implemented around suitable aquatic habitat into suitable upland habitat. If the 1,500-foot no- disturbance buffer is not feasible for certain treatments, then SPR BIO-10 would be implemented.					
To avoid impacts on California spotted owl, treatment activities would be avoided in areas adjacent to or within habitat suitable for nesting during the sensitive nesting season (March 1–August 15). If it is not feasible to avoid certain treatments during the California spotted owl nesting season, then SPR BIO-10 would be implemented.					
► To avoid impacts to fisher, mechanical and manual treatments would be avoided in habitat suitable for the species during, approximately March 1 through July 31, and broadcast/pile burning avoided during March 1 through May 1 (USFWS 2020), which is the sensitive season for the species. If it is not feasible to avoid certain treatments during this sensitive season, then SPR BIO-10 would be implemented.					
To avoid impacts on ringtail, mechanical treatments, manual snag removal, or prescribed burning activities would not be implemented during the ringtail maternity season (April 15 through June 30). If it is not feasible to avoid mechanical treatments, manual snag removal, or prescribed burning activities during the maternity season, SPR BIO-10 would be implemented.					
<b>SPR BIO-2: Require Biological Resource Training for Workers.</b> 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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League

Ascent

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.					Portion of project seeking funding from other sources: To be determined
Sensitive Natural Communities and Other Sensitive Habitats	Į	Į	ł	Į	
<ul> <li>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:</li> <li>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 will be identified using the best means possible, including keying them out using the most current edition of <i>A Manual of California Vegetation</i> (including updated natural communities data at http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website).</li> <li>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.</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:</li> <li>Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.</li> <li>Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<ul> <li>region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.</li> <li>Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service).					
<ul> <li>Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.</li> </ul>					
<ul> <li>Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.</li> </ul>					
<ul> <li>Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.</li> </ul>					
The project proponent will notify CDFW when required by pursuant to-California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.					
In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site- specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW. This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed). During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.</li> <li>The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the</li> </ul>					
These SPR requirements apply to all treatment activities and all treatment types including treatment maintenance					
Additional measures will be applied to ecological restoration treatment types:					
<ul> <li>For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.</li> </ul>					
<ul> <li>Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved.					
➤ A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential and site hydrology.					
<ul> <li>If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity.</li> </ul>					
These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.					
A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.					
<ul> <li>SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of <i>Phytopthora</i> and other plant pathogens (e.g., pitch canker (<i>Fusarium</i>), goldspotted oak borer, shot hole borer, bark beetle):</li> <li>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;</li> <li>include training on <i>Phytopthora</i> diseases and other plant pathogens in the worker awareness training;</li> <li>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;</li> <li>minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;</li> <li>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</li> <li>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 <i>Phytoptheras</i> in Native Habitats 2016).</li> <li>This SPR applies to all treatment activities and treatment types, iad when the activities and treatment types, iad when the store activities and treatment types, iad when the store activities and treatment types, iad when the store activities and treatment types, iad when the activities and t</li></ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities."					Portion of project seeking funding from other sources:
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.					To be determined
If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.					
For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:					
If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.					
► If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.					
This SPR applies to all treatment activities and treatment types, including treatment maintenance.					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Project-Specific Implementation					
If the limited operating period for annual and perennial geophyte species (i.e., non-ground-disturbing treatment activities conducted during the dormant season) is determined to be infeasible, then protocol-level surveys for these species would be conducted prior to implementation of treatments.					
Protocol-level surveys will be conducted for perennial species prior to implementation of treatments.					
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):	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League
<ul> <li>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;</li> </ul>					Portion of project seeking funding from other sources: To be determined
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;					
<ul> <li>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;</li> </ul>					
<ul> <li>stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;</li> <li>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</li> </ul>					
not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and					
<ul> <li>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).</li> </ul>					
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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	No more than 14 days prior to treatment, unless otherwise	League	Portion of project seeking SNC funding: League

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

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.

egret rookeries, monarch overwintering sites) with potential to be directly

Sierra Nevada Conservancy and Save the Redwoods League

Portion of project

To be determined

other sources:

seeking funding from

Ascent

Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

specific in a protocol

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed.					
This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
Project-Specific Implementation					
Special-status wildlife					
If it is not feasible to avoid certain treatments within 1,500 feet of aquatic habitat suitable for western pond turtle, pursuant to SPR BIO-1, to avoid impacts on western pond turtle, focused surveys for individuals and nests would be conducted prior to treatment activities that occur in habitat suitable for western pond turtle. If western pond turtles are detected during focused surveys, Mitigation Measure BIO-2b will be implemented.					
<ul> <li>If it is not feasible to avoid impacts on California spotted owl by conducting treatment activities in areas adjacent to or within habitat suitable for nesting outside of the sensitive nesting season (March 1–August 15), pursuant to SPR BIO-1, protocol-level surveys for California spotted owl would be conducted by a qualified RPF or biologist within a 0.25-mile buffer surrounding the treatment area prior to implementation of treatment activities. Surveys for California spotted owl would be conducted pursuant to the <i>Protocol for Surveying for Spotted Owls in Proposed Management Activity Areas and Habitat Conservation Areas</i> (USFS 1993). If California spotted owl are detected during focused surveys, Mitigation Measure BIO-2b will be implemented.</li> <li>If it is not feasible to avoid impacts to fisher by conducting mechanical and manual treatments either outside of the period of</li> </ul>					
approximately March 1 through July 31, and to avoid broadcast and					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>pile burning during March 1 through May 1 (USFWS 2020), surveys for fisher would be conducted by a qualified RPF or biologist following the <i>Survey Protocol for Fisher Denning Season; Methods for Informing Denning Protection Measures</i> (Tucker et al. 2020). If baited trail cameras are used, the qualified professionals should obtain a valid CDFW Scientific Collecting Permit before using bait. If fisher are detected during focused surveys, Mitigation Measure BIO-2a will be implemented.</li> <li>If it is not feasible to avoid mechanical treatments, manual snag removal, or prescribed burning activities during the ringtail maternity season (pursuant to SPR BIO-1), focused surveys for ringtail would be conducted using trail cameras, track plates, and other non-invasive survey methods to determine whether ringtails are present within the treatment area. Surveys would be conducted by a qualified RPF or biologist with a valid CDFW Scientific Collecting Permit, or presence may be assumed. If ringtails are</li> </ul>					
detected during focused surveys, or presence is assumed, Mitigation Measure BIO-2a will be implemented.					
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 CaIVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDB, eBird database, State Wildlife Action Plan) chould be reviewed in advance of the survey to identify	Initial Treatment: Y Treatment Maintenance: Y	Initial 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 no more than 14 days	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
Action Plan) should be reviewed in advance of the survey to identify 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			before treatment); if an active nest is observed, implement avoidance strategies prior to and during treatment		

Sierra Nevada Conservancy and Save the Redwoods League

Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					
<ul> <li>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,</li> </ul>					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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 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					
Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases.					
<ul> <li>Retention of Raptor Nest Trees. Trees with visible raptor nests, whether occupied or not, will be retained.</li> </ul>					
This SPR applies to all treatment activities and treatment types, including treatment maintenance.					
Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements				•	
<b>SPR GEO-1 Suspend Disturbance during Heavy Precipitation</b> : 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.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>Project-Specific Implementation</b> To prevent herbicides from being mobilized and soil from being compacted which increases runoff and erosion risk, the project proponent will suspend mechanical, prescribed herbivory, 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 or prescribed herbivory activities. The project proponent will be prepared to completely suspend mechanical and herbicide treatment activities prior to the initiation of the rain event. Activities					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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 or hoof marks in the soil. This SPR applies only to mechanical and herbicide treatment activities and all treatment types, including treatment maintenance.					
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During mechanical and prescribed burn activities that result in exposure of bare soil over 50 percent or more of the treatment area	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.					
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	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, remediate prior to the first rainfall event; inspect for evidence of erosion after the first large storm or rainfall event (i.e., $\geq$ 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	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR GEO-5 Drain Stormwater via Water Breaks:</b> 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).	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During mechanical, manual, and prescribed burn treatment activities	League	Portion of project seeking SNC funding: League

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					Portion of project seeking funding from other sources: To be determined
<b>SPR GEO-6 Minimize Burn Pile Size:</b> The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During mechanical, manual, and prescribed burn treatment activities	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<ul> <li>SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will:</li> <li>(1) Prohibit use of heavy equipment where any of the following conditions are present: <ul> <li>(i) Slopes steeper than 65 percent.</li> <li>(ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.</li> <li>(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.</li> </ul> </li> <li>(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: <ul> <li>(i) Existing tractor roads that do not require reconstruction, or</li> <li>(ii) New tractor roads flagged by the project proponent prior to the treatment activity.</li> </ul> </li> <li>(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope.</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
This SPR applies to all treatment activities and all treatment types, including treatment maintenance.					
SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment on slopes greater than 50 percent	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
Requirements	I		I	1	
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Inspect all equipment for leaks prior to treatment; inspect everyday thereafter until equipment is removed from the site; promptly remove any leaking equipment; maintain all diesel- and gasoline-powered equipment per manufacturer's specifications and in compliance with all state and federal emissions requirements during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<b>SPR HAZ-2 Require Spark Arrestors</b> : The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: N Treatment Maintenance: N	During manual treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR HAZ-3 Require Fire Extinguishers:</b> The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: N Treatment Maintenance: N	During manual treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR HAZ-4 Prohibit Smoking in Vegetated Areas:</b> The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<ul> <li>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):</li> <li>a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;</li> <li>a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during herbicide treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.</li> </ul>					
This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.					
<ul> <li>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:</li> <li>Be implemented consistent with recommendations prepared</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during herbicide treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources:
<ul> <li>annually by a licensed PCA.</li> <li>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.</li> </ul>					To be determined
<ul> <li>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.</li> </ul>					
• 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.					
SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During herbicide treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					
<ul> <li>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:</li> <li>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);</li> <li>spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift;</li> <li>low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and</li> <li>spray nozzles will be kept within 24 inches of vegetation during spraying.</li> <li>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During herbicide treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	72 hours prior to herbicide treatment, during herbicide treatment, and for 72 hours after herbicide treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Hydrology and Water Quality Standard Project Requirements					
SPR HYD-1 Comply with Water Quality Standard Project Requirements 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 may result in discharges to waters of the state; therefore; compliance with Water Code sections 13260(a)(1) and 13264 are required. The project proponent will use the State Water Board's Vegetation Treatment General Order, which provides a machanism for Water Code semiliance for anticides a machanism for Mater Code sections 13260(a)(1)	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
CalVTP PSA or PSA/Addendum. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Board's Vegetation Treatment General Order. The project's automatic enrollment satisfies the requirements of SPR HYD-1.					
<b>SPR HYD-2 Avoid Construction of New Roads:</b> The project proponent will not construct <del>or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles)</del> any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
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.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Establish WLPZs during design of treatment project; implement WLPZ protections during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

## 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	<ol> <li>Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or</li> <li>Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.</li> </ol>	<ol> <li>Fish always or seasonally present offsite within 1000 feet downstream and/or</li> <li>Aquatic habitat for nonfish aquatic species.</li> <li>Excludes Class III waters that are tributary to Class I waters.</li> </ol>	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

Water Class	Class I	Class II	Class III	Class IV
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.	
30-50 % Slope	100	75		
>50 % Slope	150	100		

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

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (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).					
<ul> <li>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.</li> </ul>					
<ul> <li>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.</li> </ul>					
<ul> <li>WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.</li> </ul>					
<ul> <li>Burn piles will be located outside of WLPZs.</li> </ul>					
<ul> <li>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.</li> </ul>					
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					

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>water bodies and may include but are not limited to mulching, riprap, grass seeding, or chemical soil stabilizers.</li> <li>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.</li> <li>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.</li> <li>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 less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is less than 30 percent and 50 feet where side-slope is a so 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.</li> </ul>					
<ul> <li>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicides:</li> <li>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.</li> <li>Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During herbicide treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					
<ul> <li>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.</li> </ul>					
<ul> <li>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.</li> </ul>					
<ul> <li>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).</li> </ul>					
<ul> <li>No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.</li> </ul>					
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.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Mark existing stormwater drainage infrastructure prior to ground disturbing activities; if a drainage structure or infiltration system is inadvertently disturbed or modified during treatment, coordinate with owner to repair damage, and	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
			restore pre-project drainage conditions		
Noise Standard Project Requirements	-	-	-		
<b>SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:</b> The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR NOI-2 Equipment Maintenance:</b> The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League

Sierra Nevada Conservancy and Save the Redwoods League

Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
applies only to mechanical treatment activities and all treatment types, including treatment maintenance.					Portion of project seeking funding from other sources: To be determined
<b>SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses:</b> The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
<b>SPR NOI-5 Restrict Equipment Idle Time:</b> The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to mechanical treatment activities within 1,500 feet of noise-sensitive receptors	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Recreation Standard Project Requirements					
SPR REC-1 Notify Recreational Users of Temporary Closures. If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
Transportation Standard Project Requirements	L	<u> </u>	<u> </u>	ł	ł
<b>SPR TRAN-1 Implement Traffic Control during Treatments:</b> Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prepare TMP prior to treatment and implement during treatments	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Standard Project Requirements	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity		
agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.							
Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.							
Public Services and Utilities Standard Project Requirements							
<b>SPR UTIL-1: Solid Organic Waste Disposition Plan</b> . For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding:		

SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring	Initial Treatment: Y	Initial Treatment: Y	Prior to and during	League	Portion of project
the disposal of material outside of the treatment area, the project	Treatment Maintenance: Y	Treatment	treatment		seeking SNC funding:
proponent will prepare an Organic Waste Disposition Plan prior to		Maintenance: Y			League
initiating treatment activities. The Solid Organic Waste Disposition Plan					Portion of project
will include the amount (e.g., tons) of solid organic waste to be					cooking funding from
managed onsite (i.e., scattering of wood materials, generating					other courses:
unburned piles, and pile burning) and transported offsite for processing					ouler sources.
(i.e., biomass power plant, wood product processing facility,					To be determined
composting). If the project proponent intends to transport solid organic					
waste offsite, the Solid Organic Waste Disposition Plan will clearly					
identify the location and capacity of the intended processing facility,					
consistent with local and state regulations to demonstrate that					
adequate capacity exists to accept the treated materials. This SPR					
applies only to mechanical and manual treatment activities and all					
treatment types, including treatment maintenance.					

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

## Air Quality

Mitigation Measure AQ-1: Implement On-Road Vehicle and Off- Road Equipment Exhaust Emission Reduction Techniques	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During treatment	League	Portion of project seeking SNC
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					tunding: League

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					Portion of project seeking funding from other sources: To be determined
Techniques for reducing emissions may include, but are not limited to, the following:					
<ul> <li>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.</li> <li>Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following</li> </ul>					
<ul> <li>criteria:</li> <li>meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer:</li> </ul>					
<ul> <li>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;</li> </ul>					
<ul> <li>contain no fatty acids or functionalized fatty acid esters; and</li> </ul>					
<ul> <li>have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines.</li> </ul>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment.</li> <li>Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes.</li> <li>Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO<sub>x</sub> and PM.</li> </ul>					
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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During ground- disturbing activities	League	Portion of project seeking SNC funding: League Portion of project seeking funding
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					Portion of project seeking funding from other sources: To be determined
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.					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Biological Resources					
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	Initial Treatment: Y Treatment Maintenance: Y	(Y/N) Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					
<ul> <li>Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</li> <li>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:</li> <li>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</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.					
Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank.					
Treatments will be designed to maintain the function of special- status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.					
<ul> <li>No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.</li> </ul>					
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					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.					
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding:
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					League Portion of project seeking funding

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
(conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following.					from other sources:
Avoid Mortality, Injury, or Disturbance of Individuals					To be determined
<ul> <li>The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:</li> </ul>					
1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly accepted science and considering published agency guidance; OR					
2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. <u>Due to the incorporation of measures that result in the project being not likely to adversely affect fisher, consultation with USFWS is not required unless the project specific measures for the species are found to be infeasible.</u>					
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.					
<ul> <li>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.</li> </ul>					
Maintain Habitat Function					
<ul> <li>The project proponent will design treatment activities to maintain the habitat function, by implementing the following:</li> </ul>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>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.</li> <li>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 are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.</li> </ul>					
A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. <u>Due to the incorporation of</u> <u>measures that result in the project being not likely to adversely</u> <u>affect fisher, consultation with USFWS is not required unless the</u> <u>project specific measures for the species are found to be</u>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<u>infeasible</u> . 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					
<u>Fisher</u>					
If the limited operating period for fisher (pursuant to SPR BIO-1) is determined to be infeasible and presence of fisher is detected during focused surveys or assumed (pursuant to SPR BIO-10), then the following avoidance and minimization measure will be required:					
<ul> <li>Implement limited operating periods for mechanical and manual treatments (March 1 through July 31) and for broadcast and pile burning (March 1 through May 1).</li> </ul>					
<ul> <li>Known fisher den or rest trees, including surrounding trees that provide beneficial thermal or predatory protection, should not be purposefully removed, with the exception of the reasonably unavoidable removal of hazards in the immediate vicinity of human activity.</li> </ul>					
<ul> <li>In high quality denning habitat for fisher, as determined by a qualified biologist or RPF, the following habitat retention measures will be required if feasible:</li> </ul>					
Retain all conifer snags greater than 35 inches in diameter and all hardwood snags greater than 27 inches in diameter; prioritize retention of large trees (greater than 24 inches dbh) with deformities, broken tops, large branches, and cavities over other trees; leave a widely distributed distribution of snags and downed logs, retaining an average of 2 to 5 logs per acre greater than 20 inches diameter; retain multi-storied canopy in drainages, swales, and north facing slopes; and limit fire intensity in areas with large trees and large snags. Any den structure known to have been active within the past 5 years should be buffered by 60 acres of the most suitable, connected					
habitat available to form a 'den cluster'. If 60 acres of suitable habitat are not available surrounding the den, then buffer by the amount of connected suitable habitat remaining. In areas					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
meeting the criteria for potential denning habitat where locations of dens are unknown, a biologist familiar with fisher ecology should identify 60 acre 'potential' den clusters, using the definition of high quality denning habitat.					
Within den clusters, fuels management should be limited to patch surface and ladder fuel removal. Do not alter vegetation structure to the point that it no longer qualifies as high-quality denning habitat (i.e., greater than 60 percent cover and mean dbh of 24 inches in the stand).					
<u>Ringtail</u>					
<ul> <li>If the limited operating period for ringtail (pursuant to SPR BIO- 1) is determined to be infeasible and presence of ringtails is detected during focused surveys or assumed (pursuant to SPR BIO-10), then the following avoidance and minimization measures will be required:</li> </ul>					
• Daily Sweeps. On the first morning of work for mechanical treatments, a qualified RPF or biologist will conduct a sweep of the area to be treated that and will search all habitat suitable for ringtails where mastication 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 (see training requirements below under "Training and Monitoring"). 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.					
<ul> <li>Training and Monitoring. On the first morning of work for mechanical treatments, the qualified RPF or biologist will provide biological resource training (as required under CalVTP PEIR SPR BIO-2) for all contractors. In addition to standard biological resource training, the qualified RPF or biologist will</li> </ul>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>provide additional training specific to ringtail that will include the following elements:</li> <li>Description of ringtail appearance (i.e., physical features, typical size) and description of typical ringtail behavior;</li> <li>Description of denning habitat suitable for ringtail, particularly in that week's treatment area. The approximate location of large trees with cavities that were previously marked will be noted;</li> <li>Measures required during operation, including daily sweeps of habitat suitable for ringtail where mastication will occur that day (i.e., heavy brush habitat, previously marked tree cavities), year-round take avoidance measures, and required increased vigilance when operating in heavy brush;</li> <li>Measures required if a ringtail is spotted (i.e., all work halts until a qualified RPF or biologist can conduct a den search and sweep; if the qualified RPF or biologist observes a ringtail or confirms the contractor's observation, the occurrence will be reported to CDFW.</li> <li>Measures required if a ringtail den is found (i.e., 0.25-mile no-disturbance buffer and requirements described above under "Active Dens" will be followed);</li> <li>Definition of and legal consequences for take of ringtail (i.e., \$10,000 fine for each take and/or 1 year in jail); and</li> <li>Requirements for contacting CDFW, which include the following circumstances: ringtails observed during treatment activities (notify within 34 hours); and take of ringtail den discovered (notify within 24 hours); and take of ringtail den discovered (notify within 24 hours);</li> </ul>					
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	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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.					Portion of project seeking funding from other sources: To be determined
Avoid Mortality, Injury, or Disturbance of Individuals					
<ul> <li>The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:</li> </ul>					
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).					
<ul> <li>No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape</li> </ul>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no- disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.					
• For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.					
<ul><li>Maintain Habitat Function</li><li>For all treatment activities, the project proponent will design</li></ul>					
<ul> <li>treatment activities to maintain the habitat function by implementing the following:</li> <li>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 appears to a trace with according to the survival to a survival</li></ul>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.					
If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained.					
A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function.					
A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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 other (i.e., non-listed) special-status wildlife species are observed during 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.					
during focused surveys (pursuant to SPR BIO-10), a no- disturbance buffer of 50 feet including a path from the nest to the nearest aquatic habitat will be established around the nest.					
<ul> <li>If the limited operating period for California spotted owl is determined to be infeasible (pursuant to SPR BIO-1), and nests</li> </ul>					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
of the species have been detected during protocol surveys (pursuant to SPR BIO-10), a no-disturbance buffer will be implemented of up to 0.25 mile would be established around active California spotted owl nests and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified biologist or RPF. In addition, overstory canopy cover within stands occupied by California spotted owl will be maintained at 60 percent or greater cover, and treatments will maintain tree age class diversity and a sufficient number of young understory trees to facilitate forest regeneration and long-term maintenance of habitat function. Additionally, one to two large snags will be retained per acre with a preference for the largest snags that exhibit the form and decay characteristics favored by California spotted owl.					
Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding:
If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.					League Portion of project seeking funding from other sources: To be determined
Compensation may include:					
<ol> <li>Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and</li> </ol>					
2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
structures, or removing existing movement barriers or other existing features that are adversely affecting the species).					
The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:					
<ol> <li>For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity.</li> </ol>					
2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.					
Review requirements are as follows:					
The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.					
<ul> <li>For species listed under ESA or CESA or a California Fully Protected Species, the project proponent will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment.</li> </ul>					
Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
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<ul> <li>For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information.</li> <li>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.</li> </ul>					
<ul> <li>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</li> <li>The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:</li> <li>Reference the Manual of California Vegetation, Appendix 2, Table A2, Fire Characteristics (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.</li> <li>Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the Manual of <i>California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.					
<ul> <li>To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).</li> </ul>					
➤ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).					
Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/).					
Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g., non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions					

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

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.					
<ul> <li>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</li> <li>If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions:</li> <li>Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: <ul> <li>restoring sensitive natural community or oak woodland functions and acreage within the treatment area;</li> <li>restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or</li> <li>preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function.</li> </ul> </li> <li>The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory existence active describes the compensatory</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ol> <li>For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity.</li> <li>For restoring or enhancing habitat within the treatment area</li> </ol>					
or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.					
The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.					
Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of	Initial Treatment: Y	Initial Treatment: Y	Prior to and during treatment	League	Portion of project seeking SNC
If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:					funding: League Portion of project seeking funding
<ul> <li>compensate for unavoidable losses of mparian habitat acreage and function by:</li> <li>restoring riparian habitat functions and acreage within the treatment area;</li> </ul>					from other sources: To be determined

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>restoring degraded riparian habitat outside of the treatment area;</li> </ul>					
<ul> <li>purchasing riparian habitat credits at a CDFW-approved mitigation bank; or</li> </ul>					
<ul> <li>preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value.</li> </ul>					
The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:					
<ol> <li>For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.</li> </ol>					
<ol> <li>For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.</li> </ol>					
The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory					

Sierra Nevada Conservancy and Save the Redwoods League Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.					
<ul> <li>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</li> <li>Impacts to wetlands will be avoided using the following measures:</li> <li>The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented.</li> <li>The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).</li> <li>A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented.</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
<ul> <li>A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.</li> <li>Within this buffer, herbicide application is prohibited.</li> <li>Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging.</li> <li>Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:</li> <li>No special-status species are present in the wetland habitat</li> <li>The wetland habitat function would be maintained.</li> <li>The prescribed burn is within the normal fire return interval for the wetland vegetation types present</li> <li>Fire containment lines and pile burning are prohibited within the buffer</li> <li>No fire ignition (and associated use of accelerants) will occur within</li> </ul>					
the wetland buffer					
<ul> <li>Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</li> <li>The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10:</li> <li>Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment.</li> <li>Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

Sierra Nevada Conservancy and Save the Redwoods League Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non- disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.					
Greenhouse Gas Emissions			<u>I</u>	4	L
<ul> <li>Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns</li> <li>When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018):</li> <li>reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;</li> <li>reduce the total area burned through mosaic burning;</li> <li>burn when fuels have a higher fuel moisture content;</li> <li>reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and</li> <li>schedule burns before new fuels appear.</li> <li>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation</li> </ul>	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	Prior to and during prescribed burning treatment	League	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined
sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from					

Mitigation Measures	Applicable to project components seeking SNC funding? (Y/N)	Applicable to project components funded by other sources? (Y/N)	Timing	Implementing Entity	Verifying/ Monitoring Entity
the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity. The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.					
Hazardous Materials, Public Health and Safety	4	L			
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 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.	Initial Treatment: Y Treatment Maintenance: Y	Initial Treatment: Y Treatment Maintenance: Y	During PSA preparation Database searches are complete; see PSA/Addendum for results	Ascent Environmental	Portion of project seeking SNC funding: League Portion of project seeking funding from other sources: To be determined

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# Attachment B

## **Biological Resources**

### Special-Status Plant Species Known to Occur in the Vicinity of the Treatment Areas and Their Potential for Occurrence in the Treatment Areas

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Mountain bent grass Agrostis humilis	_	_	2B.3	Alpine boulder and rock field, meadows and seeps. Moist to dry meadow in subalpine coniferous forest. Sometimes on calcareous substrates. Probably undercollected; high elevation grass. 5,000–11,160 feet in elevation. Blooms July–September. Perennial.	<i>May occur</i> . Fresh emergent wetlands, including wet meadows, potentially suitable for this species are present in the project area.
Abrams' onion Allium abramsii	_	_	1B.2	Lower montane coniferous forest, upper montane coniferous forest. On sandy soils, derived from disintegrated granite. 3,200– 10,010 feet in elevation. Blooms May–July. Geophyte.	<i>May occur</i> . Sierran mixed conifer forest habitat with sandy granitic soils potentially suitable for this species is present in the project area.
Kern Plateau milk-vetch Astragalus lentiginosus var. kernensis	_		1B.2	Meadows and seeps, subalpine coniferous forest. Dry, gravelly or sandy slopes or flats. 6,790–9,010 feet in elevation. Blooms June– July. Perennial.	Not expected to occur. Project area is out of range of this species. Astragalus lentiginosus var. kernensis has only been documented on the Kern Plateau, east of the project area.
Shevock's milk-vetch Astragalus shevockii	_	_	1B.3	Upper montane coniferous forest. Open Jeffrey pine forest, in granitic sand or volcanic soils and in pine-needle duff. 6,180–6,450 feet in elevation. Blooms June–July. Perennial.	Not expected to occur. Project area is out of range of this species. Astragalus shevockii is generally endemic to the Little Kern River drainage (Barneby 1977; Hickman 1993; USFS 2004).
Shevock's rockcress Boechera shevockii	_		1B.1	Upper montane coniferous forest. Rock outcrops and ledges. 8100–8,210 feet in elevation. Blooms June–July. Perennial.	Not expected to occur. Project area is out of range of this species. Boechera shevockii has only been documented at The Needles and west of Lookout Mountain, east of the project area.
Mingan moonwort Botrychium minganense	-	-	2B.2	Meadows, open forest along streams or around seeps. 3,900–10,810 feet in elevation. Blooms July–September. Geophyte.	<i>May occur.</i> Freshwater emergent wetland, wet meadows, and streams in Sierran mixed conifer habitat potentially suitable for this species is present in the project area.
Watershield Brasenia schreberi	-	_	2B.3	Aquatic from water bodies both natural and artificial in California. Ponds, slow streams. 90– 7,220 feet in elevation. Blooms June– September. Geophyte.	<i>May occur</i> . Pond habitat potentially suitable for this species is present in the project area.
Kaweah brodiaea Brodiaea insignis	_	SE	1B.2	Granite or clay soils on south to southwest facing slopes; usually in grassland surrounded by foothill woodland. 550–4,610 feet in elevation. Blooms April–June. Geophyte.	<i>Not expected to occur.</i> The project area is out of elevation range of this species.

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Shirley Meadows star-tulip Calochortus westonii			1B.2	Meadows, open woodlands; granite substrates. 4,970–6,810 feet in elevation. Blooms May–June. Geophyte.	<i>Known to occur</i> . <i>Calochortus westonii</i> was documented in the northeast portion of the project area, 0.7 mile west-northwest of the Stagg Tree during a rare plant survey on June 23, 2022 (SRL 2022). This species also has one documented occurrence from 2012 in the northern portion of the project area 0.5 mile west of the Stagg Tree and two documented occurrences from 2022 in the northern section of the project area 0.5 mile west-southwest and 0.8 mile west of the Stagg Tree (Calflora 2022). Sierran mixed conifer and montane hardwood habitat potentially suitable for this species is present elsewhere in the project area.
Flagella-like atractylocarpus Campylopodiella stenocarpa	_	_	28.2	Cismontane woodland. All California populations are on roadsides The ID of the California populations is under question, but thought to be a rare moss species in California. 330–8,530 feet in elevation. Perennial.	May occur. Sierran mixed conifer and montane hardwood forest habitat potentially suitable for this species is present in the project area. The project area is west of the Sierra Nevada crest. There is a documented occurrence from 1982 approximately 9 miles northeast of the project area (Calflora 2022).
Bolander's woodreed Cinna bolanderi	_	_	1B.2	Streambanks, wet meadows, moist sites in conifer forest. 3,980–7,290 feet in elevation. Blooms July–September. Perennial.	<i>May occur</i> . Streambank, wetland, and moist sites in conifer forest habitat potentially suitable for this species is present in the project area.
Springville clarkia Clarkia springvillensis	FT	SE	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Granitic soil. 780–4,005 feet in elevation. Blooms April–July. Annual.	Not expected to occur. Project area is out of elevation range of this species.
Tulare cryptantha Cryptantha incana	_	_	1B.3	Open conifer forest, occasionally chaparral. Granitic gravelly or rocky soils. 4,790–9,350 feet in elevation. Blooms June–August. Annual.	<i>May occur</i> . Sierran mixed conifer and chaparral habitat with gravelly and rocky soils potentially suitable for this species are present in the project area.
Jepson's dodder <i>Cuscuta jepsonii</i>	_	_	1B.2	Upper montane coniferous forest, lower montane coniferous forest, broadleaved upland forest. Primary host species are <i>Ceanothus diversifolius</i> and <i>Ceanothus</i> <i>prostratus</i> . 390–9,010 feet in elevation. Blooms July–September. Annual.	May occur. Sierran mixed conifer and montane hardwood habitat potentially suitable for this species is present in the project area. Ceanothus diversifolius, one of the primary host species of Cuscuta jepsonii, has potential to occur in the project area.
Rose-flowered larkspur Delphinium purpusii	_	_	1B.3	Chaparral, cismontane woodland, pinyon- juniper woodland. On shady rocky slopes; often on carbonates. 980–4,395 feet in elevation. Blooms April–May. Perennial.	<i>May occur</i> . Chaparral, Sierran mixed conifer, and red fir habitat with carbonate derived rocks potentially suitable for this species is present in the project area.

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>	
Recurved larkspur Delphinium recurvatum	_	_	1B.2	Chenopod scrub, valley and foothill grassland, cismontane woodland. On alkaline soils; often in valley saltbush or valley chenopod scrub. 10–2,600 feet in elevation. Blooms March– June. Perennial.		
Mineral King draba Draba cruciata	I	_	1B.3	Subalpine coniferous forest. On steep rocky slopes in gravelly soils. 8,210–11,110 feet in elevation. Blooms June–August. Perennial. May occur. Sierran mixed conife red fir habitat with steep rocky potentially suitable for this spec		
Pierpoint Springs dudleya Dudleya cymosa ssp. costatifolia	_	_	1B.2	Chaparral, cismontane woodland. On limestone. 4,700–5,250 feet in elevation. Blooms May–July. Perennial.	May occur. Sierran mixed conifer and red fir habitat with limestone substrate potentially suitable for this species is present in the project area. There is a 2018 documented occurrence of Dudleya cymosa ssp. costatifolia approximately 2.2 miles southwest fron the project area (CCH2 2022).	
Hall's daisy Erigeron aequifolius	_	_	1B.3	Broadleafed upland forest, lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest. On dry rock outcrops in granite walls, crevices, and canyons. 4,920–8,010 feet in elevation. Blooms June–August. Geophyte.	<i>May occur</i> . Sierran mixed conifer forest and montane hardwood habitat with granitic outcrops potentially suitable for this species is present in the project area.	
Keil's daisy Erigeron inornatus var. keilii	_	_	1B.3	Meadows and seeps, lower montane coniferous forest. Dry slopes, meadows, in coniferous forest. 2,290–7,230 feet in elevation. Blooms June–September. Perennial.	<i>May occur</i> . Sierran mixed conifer and wet meadow potentially suitable for this species is present in the project area.	
Kern River daisy Erigeron multiceps	_	_	1B.2	Upper montane coniferous forest, meadows and seeps. Riverbanks and dry meadow borders; usually in open, grassy areas. 4,920– 8,210 feet in elevation. Blooms June– September. Perennial.	Not expected to occur. Project area is out of range of this species. <i>Erigeron</i> <i>multiceps</i> has only been documented in California on the Kern Plateau, north, east, and south of the project area (CNPS 2022).	
Twisselmann's buckwheat Eriogonum twisselmannii	_	SR	1B.2	Upper montane coniferous forest. Dry, granitic outcrops. 7,790–9,210 feet in elevation. Blooms June–September. Perennial.	<i>May occur</i> . Sierran mixed conifer forest habitat with granitic outcrops potentially suitable for this species is present in the project area.	
Kaweah fawn lily Erythronium pusaterii	_	_	18.3	Subalpine coniferous forest, meadows and seeps. On granitic loam soils and granite outcrops; also on metamorphics. 7,210–9,110 feet in elevation. Blooms May–July. Geophyte.	<i>Known to occur.</i> Erythronium pusaterii was documented on the eastern border of the project area 0.2-0.3 mile southeast of the Stagg Tree. Sierran mixed conifer and freshwater emergent wetland habitat with granitic outcrops and/or metamorphics potentially suitable for this species is present elsewhere in the project area. There are five documented occurrences directly east-southeast of the project area (Calflora 2022; CCH2 2022)	

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>	
Greenhorn fritillary Fritillaria brandegeei	_	_	1B.3	Lower montane coniferous forest. Granitic soils and open forest. 4,920–7,210 feet in elevation. Blooms April–June. Geophyte.	<i>May occur</i> . Openings in Sierran mixed conifer forest habitat with granitic soils potentially suitable for this species are present in the project area.	
Rosette cushion cryptantha Greeneocharis circumscissa var. rosulata	_	_	1B.2	Alpine boulder and rock field, subalpine coniferous forest. Gravelly, granitic substrates. 9,670–12,010 feet in elevation. Blooms July– August. Annual.	Not expected to occur. Project area is out of elevation range of this species.	
Copper-flowered bird's- foot trefoil <i>Hosackia oblongifolia</i> var. <i>cuprea</i>	_	_	1B.3	Meadows and seeps (edges), upper montane coniferous forest. Wet meadow borders. 7,600–9,190 feet in elevation. Blooms June– August. Geophyte.	<i>May occur</i> . Fresh emergent wetland (e.g., wet meadows) in Sierran mixed conifer habitat potentially suitable for this species is present in the project area. There is a documented occurrence of a <i>Hosackia oblongifolia</i> var. <i>cuprea</i> population (>4,180 individuals observed in 2020) 2.5 miles east-southeast of the project area (CNDDB 2022a).	
Munz's iris Iris munzii	_	_	1B.3	Cismontane woodland. Granitic moist sandy loam soil, often along streams. 1,000–2,630 feet in elevation. Blooms March–April. Geophyte.	Not expected to occur. Project area is out of elevation range of this species.	
Field ivesia Ivesia campestris	_	_	1B.2	Subalpine coniferous forest, upper montane coniferous forest, meadows and seeps. Meadow edges. 6,480–11,140 feet in elevation. Blooms May–August. Perennial.	<i>May occur</i> . Meadow habitat potentially suitable for this species is present in the project area. There is a documented occurrence of <i>Ivesia campestris</i> 1.5 miles east of the project area (CNDDB 2022a).	
Wright's jaffueliobryum moss Jaffueliobryum wrightii	-	-	2B.3	Alpine dwarf scrub, pinyon and juniper woodland, Mojavean desert scrub. Dry openings, rock crevices, carbonate. 520–8,210 feet in elevation. Blooms . Perennial.	Not expected to occur. Project area does not contain alpine dwarf scrub, pinyon and juniper woodland, or Mojavean desert scrub habitat potentially suitable for this species.	
Madera leptosiphon Leptosiphon serrulatus	_	_	1B.2	Cismontane woodland, lower montane coniferous forest. Dry slopes; often on decomposed granite in woodland. 980–4,270 feet in elevation. Blooms April–May. Annual.	Not expected to occur. Project area is out of elevation range of this species.	
Yosemite lewisia Lewisia disepala	-	_	1B.2	Lower montane coniferous forest, pinyon- juniper woodland, upper montane coniferous forest. Fine gravel on rock outcrops, ridges, or domes. Granitic soils. 3,390–11,490 feet in elevation. Blooms March–June. Perennial.	May occur. Sierran mixed conifer forest habitat with rock outcrops and granitic soils potentially suitable for this species is present in the project area.	
Hockett Meadows lupine Lupinus lepidus var. culbertsonii	_	_	1B.3	Meadows and seeps, upper montane coniferous forest. Generally mesic, rocky sites. 6,390–11,500 feet in elevation. Blooms July– August. Perennial.	May occur. Fresh emergent wetlands/wet meadows potentially suitable for this species are present in the project area.	

Species	Listing Status <sup>1</sup> Federal	Listing Status <sup>1</sup> State	CRPR	Habitat	Potential for Occurrence <sup>2</sup>
Broad-nerved hump moss <i>Meesia uliginosa</i>	_	_	2B.2	Meadows and seeps, bogs and fens in upper montane coniferous and subalpine coniferous forests. Moss on damp soil in or at the edges of wet meadows and fens. Often found on the edge of fens or raised above the fen on hummocks/shrub bases. 3,590–9,210 feet in elevation. Blooms July–October. Perennial.	<i>May occur</i> . Wet meadow habitat potentially suitable for this species is present in the project area.
Purple mountain-parsley Oreonana purpurascens	-	-	1B.2	Ridgetops, generally on metamorphic rocks, in red-fir or lodgepole-pine forests. 6,980–9,400 feet in elevation. Blooms May–June. Perennial.	<i>May occur</i> . Red fir forest habitat potentially suitable for this species is present in the project area.
Cut-leaf checkerbloom Sidalcea multifida	_	_	2B.3	Lower montane coniferous forest, meadows and seeps, Great Basin scrub, pinyon and juniper woodland. Relatively dry places, sagebrush scrub, pine forest, and lower montane pine forest. 5,740–9,190 feet in elevation. Blooms May–September. Perennial.	<i>May occur</i> . Relatively dry sites in Sierran mixed conifer habitat potentially suitable for this species is present in the project area.
Prairie wedge grass Sphenopholis obtusata	_	_	2B.2	Wet meadows, streambanks, ponds. 980– 6,570 feet in elevation. Blooms April–July. Perennial.	<i>May occur</i> . Streambank, pond, and wetland habitat potentially suitable for this species is present in the project area.
Grey-leaved violet Viola pinetorum ssp. grisea	-	_	1B.2	Subalpine coniferous forest, upper montane coniferous forest, meadows and seeps. Dry mountain peaks and slopes. 5,180–12,140 feet in elevation. Blooms April–July. Perennial.	May occur. Dry slopes in Sierran mixed conifer habitat potentially suitable for this species is present in the project area.

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

1 Legal Status Definitions

### Federal:

FT Federally Listed as Threatened (legally protected by ESA)

### State:

SE State Listed as Endangered (legally protected by CESA)

SR State Listed as Rare (legally protected by NPPA)

### 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).

2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

### **CRPR** Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)

0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)

0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

2 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present in the treatment area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the treatment area; however, there are little to no other indicators that the species might be present.

Known to occur: The species, or evidence of its presence, has been reported by others.

Sources: Calflora 2022; CCH2 2022; CNDDB 2022a; Jepson 2022; NatureServe 2022

### Special-Status Wildlife Species Known to Occur in the Vicinity of the Treatment Areas and Their Potential for Occurrence in the Treatment Areas

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>					
Invertebrates									
Crotch bumble bee Bombus crotchii	_	_	Coastal California east to the Sierra-Cascade crest and south into Mexico. Suitable habitats include grasslands and scrub. Food plant genera include <i>Antirrhinum, Phacelia, Clarkia,</i> <i>Dendromecon, Eschscholzia,</i> and <i>Eriogonum</i> .	Not expected to occur. The species occurred historically (1935) in the general vicinity of the project site to the east in the Kern River drainage (CNDDB 2022a); however, the project site is outside of the current range of the species (CDFW 2019).					
Fishes									
California golden trout Oncorhynchus mykiss aguabonita	riss – SSC		Native to Kern Plateau in wide, shallow, and exposed streams with little riparian vegetation. Transplanted within and outside of California beyond native range. Stream bottoms of sand, gravel, and some cobble. Water is clear and usually cold, but summer temperatures can vary from 3 to 22 degrees C.	Not expected to occur. While golden trout have been transplanted in many areas of California, the project does not occur within the Kern River drainage (CDFW2022a); therefore, it is located outside of the native range of this species.					
Kern River rainbow trout Oncorhynchus mykiss gilberti	_	SSC	Endemic to the upper Kern River and its tributaries. Cool, clear, fast flowing streams where riffles are abundant.	<i>Not expected to occur.</i> The project does not occur within the Kern River drainage (CDFW 2022b); therefore, it is located outside of the range of this species.					
Little Kern golden trout Oncorhynchus mykiss whitei	FT	_	Native to the Little Kern River in Tulare County. Found in clear, cold mountain streams and lakes at 5,000 to 9,000 feet. Need well- oxygenated, gravel-bottomed shallows for spawning.	<i>Not expected to occur.</i> The project does not occur within the Little Kern River drainage (CDFW 2022c); therefore, it is located outside of the range of this species.					
Amphibians and Reptiles									
Foothill yellow- legged frog Rana boylii	_	SE	Partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg- laying. Need at least 15 weeks to attain metamorphosis. Endangered: Southern Sierra, Central Coast, South Coast. Threatened: Feather River, Northern Sierra. North Coast: Not Listed.	Not expected to occur: Species has been extirpated from the North Fork Tule River into which Alder Creek flows downstream of the project (CNDDB 2022a). Furthermore, an assessment of the distribution of the species (Hayes et, al 2016) concluded that the species has a highly limited distribution on the Sequoia National Forest that bounds the project site.					
(Southern) Mountain yellow-legged frog - Northern DPS Rana muscosa	FE	SE	Northern DPS was determined to warrant listing as endangered, April 2014, effective June 30, 2014. Almost always encountered within a few feet of water (deep, high mountain lakes, ponds, and streams). Tadpoles may require 2-4 years to complete their aquatic development.	Not expected to occur. The species is known to occur within South Mountaineer approximately 1 mile from the project site over a ridgeline (CNDDB 2022a). There is no hydrologic connection between South Alder Creek and South Mountaineer Creek, and the species is not known to disperse greater than 0.6 mile across upland habitat (USFS 2014). The portion of South Alder Creek within the project site is not likely to provide breeding habitat due to its high gradient (Center for Biological Diversity and Pacific Rivers Council 2000), and presence of trout. Poppy Lake is not suitable habitat for mountain yellow- legged frog due to the high number of fish within the lake, which would prey on frogs, tadpoles, and eggs.					

Sierra Nevada Conservancy and Save the Redwoods League Alder Creek Sequoia Resilience and Post-Fire Restoration Project PSA and Addendum to the PEIR

Species	Federal Listing Status <sup>1</sup>	State Listing Status <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>	
Western pond turtle Emys marmorata	-	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	<i>May occur.</i> The lower elevation portion of the project site along Alder Creek is at or below the elevational limit for the species (CNDDB 2022b), and limited basking sites may be available directly along the creek; however, species distribution in the project site would be limited by the steep slopes along Alder Creek and that the elevation of the other waters (pond and upper portions of Alder Creek) are above the elevational limit for the species.	
Birds					
Black swift Cypseloides niger	_	SSC	Coastal belt of Santa Cruz and Monterey Co; central and southern Sierra Nevada; San Bernardino and San Jacinto Mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Not expected to occur. The small cascades along Alder Creek within the project site are not true waterfalls and likely too small to provide suitable nesting habitat for the species.	
California spotted owl Strix occidentalis occidentalis	Ι	SSC	Broadleaved upland forest, lower montane coniferous forest, and upper montane coniferous forest. Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure >40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	<i>Known to occur</i> . Suitable nesting habitat is present in the portions of the project area that burned with low to moderate intensity in the Castle Fire. The species has been documented to occur within the project site (CNDDB 2022; Colibri 2021).	
Mammals					
California wolverine Gulo gulo	_	ST FP	Alpine, alpine dwarf scrub, meadow and seep, montane dwarf scrub, north coast coniferous forest, riparian forest, subalpine coniferous forest, upper montane coniferous forest, wetland. Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.	<i>Not expected to occur.</i> Wolverine has not been detected within the Southern Sierra Nevada since 1986 (CNDDB 2022a). Therefore, the project site is outside of the known current range of the species.	
Fisher - Southern Sierra Nevada ESU <i>Pekania pennanti</i> pop. 2		ST	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	<i>May occur.</i> Fisher have been documented to occur in the vicinity of the project site (CNDDB 2022a). Surveys conducted in 2021 did not detect fisher in the project site (Colibri 2021); however, the project site is within the range of the species, and suitable denning habitat is present in the areas of the project site where the Castle Fire burned at lower intensity.	
Ringtail Bassariscus astutus	_	FP	Riparian habitats, forest habitats, and shrub habitats used for denning and foraging in lower to middle elevations.	<i>May occur.</i> Ringtail have not been documented within or adjacent to the project site; however, the species is not tracked in the CNDDB. Surveys conducted in 2021 did not detect ringtail in the project site (Colibri 2021); however, the project site is within the range of the species and cavities in logs, snags, and live trees, and dense brush in the project site may provide suitable denning habitat for the species.	

Species	FederalStateListingListingStatus1Status1		Habitat	Potential for Occurrence <sup>2</sup>	
Sierra Nevada red fox - Sierra Nevada DPS <i>Vulpes vulpes necator</i> pop. 2	FE	ST	Use multiple habitat types in the alpine and subalpine zones including high-elevation conifer dominated by whitebark pine, mountain hemlock and lodgepole pine, as well as meadows and fell-fields; typically in areas of heavy snow cover. Generally above 1,200 meters (3,900 feet).	<i>Not expected to occur.</i> While the project site is within the historic range of the species. The current range of the species in the Sierra Nevada is restricted to an area north of Yosemite and south of approximately Highway 4 (USFWS 2018).	
Spotted bat Euderma maculatum	_	SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	<i>May occur.</i> The species roosts in cracks and crevices within large cliffs (CWHR 2000), and these features are not present within the project site; however, suitable roosting habitat occurs near to the project site and the species may forage in the more open southern portions of the project site.	

Notes: CNDDB = California Natural Diversity Database; ESU = Evolutionary Significant Unit; DPS= Distinct Population Segment

<sup>1</sup> Legal Status Definitions

### Federal:

- FE Endangered (legally protected)
- FT Threatened (legally protected)

### State:

- ST Threatened (legally protected)
- SE Endangered (legally protected)
- FP Fully protected (legally protected)

SSC Species of special concern (no formal protection other than CEQA consideration)

<sup>2</sup> Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present in the treatment area due to poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.

May occur: Suitable habitat is available in the treatment area; however, there are little to no other indicators that the species might be present.

Known to occur: The species, or evidence of its presence, has been reported by others.

Sources: CNDDB 2022a, 2022b; CDFW 2019, 2022a, 2022b, 2022c; Center for Biological Diversity and Pacific Rivers Council 2000; Colibri 2021; CWHR 2000; USFS 2014; USFWS 2018.

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# Attachment C

## Hazardous Materials



EnviroStor Database



# ENVIROSTOR

PROJEC	T SEARCH RESUL	.TS		;	STATUS:	All Statuses	►	GO
SEARCH CRITER	IA: 93265, TULARE							
1 RECORDS	FOUND							
	SITE / FACILITY NAME	PROGRAM ESTOR / EPA ID TYPE	<u>STATUS</u>	DESCRIPTION	<u>CITY</u>	<u>CALE</u>	NVIROSCREEN COI	UNTY
[REPORT] [MAI	2]							

Back to Top

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#### SITES IDENTIFIED WITH WASTE CONSTITUENTS ABOVE HAZARDOUS WASTE LEVELS OUTSIDE THE WASTE MANAGEMENT UNIT

		REGION	SWAT	WASTE	SOLID			
COUNTY	СПТҮ			DISCHARGER SYSTEM NO.	NO.	WASTE MANAGEMENT UNIT NAME	FACILITY NAME	AGENCY NAME
DEL NORTE	CRESCENT CITY	1	2	1A880520NSL-01		DEL NORTE COUNTY- PESTICIDE STORAGE	DEL NORTE PESTICIDE STORAGE AR	DEL NORTE, COUNTY OF
CONTRA COSTA	PITTSBURG	2	1	2 071059002-02	07-A1-0001	U.S. STEEL CORPPITTSBURG SITE LA	WDR-USS-POSCO	USS-POSCO
SOLANO	VALLEJO	2	1	2 482011003-01	48-AA-0008	US NAVY MARE ISLAND SANITARY LANDFILL	WDR-NAVAL SHIPYARD/CLASS I LAN	MARE ISLAND NAVAL SHIPYARD
CONTRA COSTA	RICHMOND	2	3	2 071007002-01		CHEVRON CHEMICAL COMPANY-OLD SITES	WDR-ORTHO DIV-RICHMOND PLANT	CHEVRON CHEMICAL COMPANY
MONTEREY	FORT ORD (Marina)	3	1	3 270301004-01	27-AA-0015	FORT ORD LANDFILL	SANITARY LANDFILL	U.S. ARMY, FORT ORD
SANTA BARBARA	LOMPOC	3	3	3 420305001-01	42-AA-0017	LOMPOC CITY LANDFILL	SOLID WASTE DISPOSAL SITE	LOMPOC CITY
LOS ANGELES	MONTEREY PARK	4	1	4B190332001-01	19-AM-0001	OPERATING INDUSTRIES LANDFILL	OPERATING INDUSTRIES, INC.	OPERATING INDUSTRIES, INC.
TULARE	WOODLAKE	5F	1	5D540300010-01	54-AA-0007	TULARE COUNTY-WOODLAKE LANDFILL	WOODLAKE SWDS	TULARE, COUNTY OF
FRESNO	FRESNO	5F	2	5D100300001-01		MCKINLEY AVE. YARD	T.H. AGRICULTURE AND NUTRITION	NORTH AMERICAN PHILLIPS
KINGS	CORCORAN	5F	2	5D160302001-01	16-AA-0011	KINGS COUNTY-CORCORAN LANDFILL	CORCORAN SWDS	KINGS COUNTY WASTE MGMT AUTH.
FRESNO	FRESNO	5F	3	5D100319001-01	10-AA-0013	ORANGE AVENUE DISPOSAL COMPANY	ORANGE AVENUE LANDFILL	ORANGE AVENUE DISP CO. INC
TULARE	EXETER	5F	3	5D540300003-01	54-AA-0002	TULARE COUNTY-EXETER DISPOSAL SITE	EXETER SWDS	TULARE, COUNTY OF
MERCED	ATWATER	5F	4	5C240115001-01		ATWATER CITY	BERT CRANE ROAD LANDFILL	ATWATER, CITY OF
FRESNO	FOWLER	5F	5	5D100325N01-01		FOWLER CITY	FOWLER CITY LANDFILL (OLD)	FOWLER, CITY OF
BUTTE	OROVILLE	5R	2	5A042005001-01		KOPPERS COMPANY-OROVILLE SITE	KOPPERS WOOD PRESERVING ISW	KOPPERS INDUSTRIES INC.
BUTTE	CHICO	5R	4	5A040302N01-01		CHICO CITY BURN DUMP	HUMBOLDT ROAD LANDFILL	CHICO, CITY OF
SACRAMENTO	SACRAMENTO	5S	1	5A340700003-01	34-AA-0008	US AIR FORCE-MCCLELLAN AFB LANDFILL	CLASS III SITE 8 (CLOSURE)	US AIR FORCE-MCCLELLAN AFB
SACRAMENTO	MATHER (Rancho Cordova)	5S	2	5A340700001-01		US AIR FORCE-MATHER FIELD LANDFILL	MATHER AFB ENVIRONMENTAL MGMT	US AIR FORCE – MATHER AFB
SACRAMENTO	SACRAMENTO	5S	3	5B342000N01-01		SACRAMENTO ARMY DEPOT	SACRAMENTO ARMY DEPOT	U.S. ARMY
SAN JOAQUIN	STOCKTON	5S	3	5 390002NUR-01	39-AA-0006	US NAVY COMMUNICATIONS LANDFILL	U.S.N. COMMUNICATION STA. LANDF	U.S. NAVY COMMUNICATIONS
SAN JOAQUIN	FRENCH CAMP	5S	3	5 390003NUR-01		US ARMY-SHARPE ARMY DEPOT	US ARMY-SHARPE ARMY DEPOT	US ARMY
SAN JOAQUIN	TRACY	5S	5	5 390006NUR-01		SITE 300 (OTHER 39 WMUS)	LAWRENCE LIVERMORE LAB	LAWRENCE LIVERMORE LABS
INYO	KEELER	6V	1	6B142000041-01	14-AA-0008	US TUNGSTEN OWENS LAKE LANDFILL	OWENS LAKE LANDFILL	UMETCO MINERALS CORPORATION
ORANGE	FULLERTON	8	1	8300002NUR-01		MCCOLL SITE	MCCOLL SLUDGE DISPOSAL SITE	TOXIC SUBSTANCES CONTROL DIVIS
RIVERSIDE	RIVERSIDE	8	1	8 330325001-01		STRINGFELLOW QUARRY ACID PITS	STATE OF CALIFORNIA-STRINGFELLOW	TOXIC PROGRAM MANAGEMENT SECT