

# **Attachment A**

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Mitigation Monitoring and  
Reporting Program for the  
Mount Diablo State Park  
Vegetation Treatment Project



# MITIGATION MONITORING AND REPORTING PROGRAM

## INTRODUCTION

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies “to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment.” A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project because the Project-Specific Analysis/Addendum (PSA/Addendum) to the California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (Program EIR) 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 Program EIR.

## 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 Program EIR 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 Program EIR. SPRs and mitigation measures that are referenced more than once in the PSA are not duplicated in the MMRP. Instructions for project-specific implementation of certain SPRs and mitigation measures has been added to tailor the specific impact avoidance and minimization actions relevant to the proposed treatments, agency standard practices, and the conditions and resources present within each treatment site. In addition, non-substantive clarifying edits to mitigation measures in the Program EIR 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 Program EIR.

## ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, California State Parks (CSP), Diablo Range District – Northern Region is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. CSP will be responsible for implementation of mitigation measures pursuant to Section 15097 of the State CEQA Guidelines.

As defined in the CalVTP Program EIR and the PSA/Addendum, 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 lead agency and implementing entity, the “project proponent” as identified in the SPRs and mitigation measures refers to CSP.

## REPORTING

CSP 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.

## MITIGATION MONITORING AND REPORTING PROGRAM TABLE

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

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

## 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 Program EIR 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 Archeology, Historic Archeology, Conservation, Cultural Anthropology, or Curation degree from an accredited university and meet the Secretary of Interior's Qualifications Standards (36 CFR Part 61). The project proponent will review the resume and approve the qualifications of the archaeologists.

**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 (CNDDDB) 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	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Administrative Standard Project Requirements</b>			
<p><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.</p>	Prior to treatment	California State Parks	California State Parks
<p><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.</p>	Prior to treatment	California State Parks	California State Parks
<p><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 requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.</p>	At least 3 days prior to prescribed burn treatment activities	California State Parks	California State Parks
<p><b>SPR AD-5 Maintain Site Cleanliness:</b> 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.</p>	Prior to, during, and following treatment	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><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.</p>	One to three days prior to treatment activities	California State Parks	California State Parks
<p><b>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects.</b> 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 information available to the public via an online database or other mechanism.</p> <p>Information on proposed projects (PSA in progress):</p> <ul style="list-style-type: none"> <li>▶ GIS data that include project location (as a point), or project latitude/longitude;</li> <li>▶ project size (typically acres);</li> <li>▶ treatment types and activities; and</li> <li>▶ contact information for a representative of the project proponent.</li> </ul> <p>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).</p> <p>Information on approved projects (PSA complete):</p> <ul style="list-style-type: none"> <li>▶ A completed PSA Environmental Checklist;</li> <li>▶ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);</li> <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>	<p>Prior to, during, and following treatment</p> <p><b>Information on the proposed project (PSA/Addendum in progress) was submitted to CAL FIRE on September 20, 2022</b></p>	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Information on completed projects (following initial treatment):</p> <ul style="list-style-type: none"> <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> <li>▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes                             <ul style="list-style-type: none"> <li>▪ Size of treated area (typically acres);</li> <li>▪ Treatment types and activities;</li> <li>▪ Dates of work;</li> <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> </ul> </li> </ul> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>			
<b>Aesthetic and Visual Resource Standard Project Requirements</b>			
<p><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.</p>	During treatment	California State Parks	California State Parks
<p><b>SPR AES-2 Avoid Staging within Viewsheds:</b> 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.</p>	During treatment	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><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.</p>	During treatment	California State Parks	California State Parks
<b>Air Quality Standard Project Requirements</b>			
<p><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.</p>	During treatment	California State Parks	California State Parks
<p><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.</p>	Prior to prescribed burn treatment activities	California State Parks	California State Parks
<p><b>SPR AQ-3 Create Burn Plan:</b> The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	Prior to prescribed burn treatment activities	California State Parks	California State Parks
<p><b>SPR AQ-4 Minimize Dust:</b> To minimize dust during treatment activities, the project proponent will implement the following measures:</p> <ul style="list-style-type: none"> <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>	During treatment	California State Parks	California State Parks



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ 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.</li> <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 (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> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p><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 (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.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR AQ-6: Prescribed Burn Safety Procedures.</b> Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	During prescribed burn treatment activities	California State Parks	California State Parks
<b>Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements</b>			
<p><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.</p>	<p>Prior to treatment</p> <p><b>Records for the project area were obtained from California State Parks; see PSA/Addendum for a summary of results.</b></p>	California State Parks	California State Parks
<p><b>SPR CUL-2 Contact Geographically Affiliated Native American Tribes:</b> 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:</p> <ul style="list-style-type: none"> <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> <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> </ul> <p>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.</p>	<p>Prior to treatment</p> <p><b>Tribes have been contacted and Sacred Lands File (SLF) query completed; see PSA/Addendum for a summary of consultation and SLF results.</b></p>	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><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.</p>	<p>Prior to treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><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. 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.</p> <p><b>Project-Specific Implementation:</b></p> <p>The culturally affiliated tribe will be provided the opportunity to attend surveys of treatment areas where the tribe has previously expressed interest. Two weeks prior to a survey, the tribe will be invited to attend the survey with the archaeologically-trained resource professional and/or qualified archaeologist, and the tribe will be given the opportunity to interpret the site for the archaeological report.</p>	<p>Prior to treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>SPR CUL-5 Treatment of Archaeological Resources:</b> If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation:</b></p> <p>If cultural resources are identified within a treatment area and determined to be indigenous in nature, the archaeologically-trained resource professional and/or qualified archaeologist will notify the culturally affiliated tribe. The tribe will work with the project proponent as outlined in SPR CUL-6.</p>			
<p><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.</p> <p><b>Project-Specific Implementation:</b></p> <p>If tribal cultural resources are identified within a treatment area and determined to be significant by the culturally affiliated tribe(s), the site will be temporarily flagged. Any flagging will be removed after treatment to maintain the confidentiality of the site location.</p> <p>Measures to avoid impacts to an identified tribal cultural resource during treatment may include the following:</p> <ul style="list-style-type: none"> <li>▶ Dense vegetation within the site boundaries will be hand-cleared. Heavy Equipment will not be used.</li> <li>▶ Duff will be removed from bedrock mortars and other modified features.</li> <li>▶ Herbicides will not be used within the site boundary, as delineated by the protective flagging or marking.</li> <li>▶ The culturally affiliated tribe will be invited to inspect the resource after vegetation clearing to reassess the site boundary and will be invited to be present when treatment activities are occurring within an identified tribal cultural resource.</li> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ If the culturally affiliated tribe provides CSP with a list of traditional plants they would like to gather prior to project implementation, CSP shall notify the tribe 2 weeks prior to removal of the traditional plants.</li> <li>▶ Trees within or near the boundaries of the site may be felled directionally out of the sites, so long as their removal will not affect contributing elements to the site, such as artifacts, features or cultural soils. When tree removal occurs within the boundaries of sites, then the stumps should not be removed, but may be ground down. This minimizes the potential to impact subsurface cultural resources.</li> </ul>			
<p><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 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.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><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.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>Biological Resources Standard Project Requirements</b></p>			
<p><b>SPR BIO-1: Review and Survey Project-Specific Biological Resources.</b> 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, CNDDDB, 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</p>	<p>Prior to treatment. <b>Initial data review and reconnaissance-level survey was conducted in October 2022; see PSA/Addendum for results.</b></p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:</p>			
<p><b>1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.</b> 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:</p> <ul style="list-style-type: none"> <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> </ul> <p>Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Project-Specific Implementation</b></p> <p><u>Special-status plants</u></p> <ul style="list-style-type: none"> <li>▶ For special-status plants not listed under CESA or ESA, to avoid impacts on the annual and perennial geophyte species identified in Table 4.5-2 of the PSA/Addendum, only non-ground-disturbing treatment activities (i.e., manual treatments, herbicide application, and prescribed burning) will be implemented and only during the dormant season for these species (i.e., when the plant has no aboveground parts), which will generally occur during the winter, if feasible, provided the treatment will 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 these species. 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 will be 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 will not be conducted without prior implementation of SPR BIO-7.</li> </ul> <p><u>Special-Status Wildlife</u></p> <ul style="list-style-type: none"> <li>▶ Because there is no reliable season during which all impacts on Alameda whipsnake, California red-legged frog, California tiger salamander, western pond turtle, western spadefoot, Crotch’s bumble bee, American badger, and mountain lion could be avoided and avoidance of habitat is not feasible due to these species’ variable habitat preferences, implementation of SPR BIO-10 for these species would be required before all treatment activities.</li> <li>▶ To avoid impacts on special-status nesting birds, mechanical treatments, manual treatments, herbicide application, and prescribed burning will not be implemented from January 15 to August 31, if feasible. If conducting some treatments outside of the nesting bird season is determined to be infeasible, then SPR BIO-10 will be implemented.</li> <li>▶ To avoid impacts on ringtail, a limited operating period for mechanical treatments and prescribed burning activities from April 15 to July 31 will be implemented, if feasible. If conducting some mechanical and prescribed burning treatments outside of the ringtail maternity season is determined to be infeasible for certain treatments, then SPR BIO-10 will be implemented.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► To avoid impacts on special-status bat maternity colonies, a limited operating period for mechanical treatments, manual treatments, and prescribed burning from April 1 to August 31 will be implemented, if feasible. If the limited operating period is infeasible, focused surveys will be required per SPR BIO-10.</p> <p><b>2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided.</b> 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: <a href="https://www.wildlife.ca.gov/Conservation/Survey-Protocols">https://www.wildlife.ca.gov/Conservation/Survey-Protocols</a>. 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).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p><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 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.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Sensitive Natural Communities and Other Sensitive Habitats</b>			
<p><b>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.</b> 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:</p> <ul style="list-style-type: none"> <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 and sensitive habitats. 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 <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>), 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> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Prior to treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.</b> 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:</p> <ul style="list-style-type: none"> <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 topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.</li> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <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> <li>▶ 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 <i>Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service</i>).</li> <li>▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.</li> <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> <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> <li>▶ The project proponent will notify CDFW when required by 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.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p><b>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.</b> 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).</p> <p>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.</p> <p>For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <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 will 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 extent needed to avoid type conversion.</li> </ul> <p>These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.</p> <p>Additional measures will be applied to ecological restoration treatment types:</p> <ul style="list-style-type: none"> <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> <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 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 will be improved.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ 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 will 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.</li> <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> <p>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.</p> <p>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 will not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.</p>			
<p><b>SPR BIO-6: Prevent Spread of Plant Pathogens.</b> 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>Phytophthora</i> and other plant pathogens (e.g., pitch canker (<i>Fusarium</i>), goldspotted oak borer, shot hole borer, bark beetle):</p> <ul style="list-style-type: none"> <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> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ include training on <i>Phytophthora</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> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p><b>SPR BIO-7: Survey for Special-Status Plants.</b> If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities."</p> <p>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.</p> <p>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.</p> <p>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:</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ 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.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ For special-status plants not listed under ESA or CESA, 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 will be conducted prior to implementation of treatments.</li> <li>▶ Protocol-level surveys will be conducted for special-status plants listed under ESA or CESA and perennial non-listed species prior to implementation of treatments.</li> </ul>			
<b>Invasive Plants and Wildlife</b>			
<p><b>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.</b> 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):</p> <ul style="list-style-type: none"> <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> <li>▶ 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;</li> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <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> <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> <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, and/or prescribed burning, 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 not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and</li> <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> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<b>Wildlife</b>			
<p><b>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.</b> If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.</p>	<p>No more than 14 days prior to treatment, unless otherwise specified.</p> <p>Surveys for Alameda whipsnake and western pond turtle will occur immediately prior to implementation.</p>	<p>California State Parks</p>	<p>California State Parks</p>



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ Alameda whipsnake will generally be assumed present in all areas identified as native Alameda whipsnake habitat, which generally is defined as native core scrub communities, adjacent grasslands, adjacent woodlands, and open woodland habitat. Alameda whipsnake core scrub habitat is composed of variable native communities including maritime chaparral, coastal scrub, coyote brush scrub, or serpentine scrub, where habitat patch size is at least 0.5 acre. Implementation of MM BIO-2a would be required before all treatment activities in suitable habitat year-round because there is no reliable season during which all impacts on Alameda whipsnake could be avoided and avoidance of habitat suitable for the species is not feasible due to the species' variable habitat preferences.</li> <li>▶ A qualified RPF or qualified biologist will conduct protocol-level surveys for California red-legged frog pursuant to the Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog (USFWS 2005) within habitat potentially suitable for the species, or presence of the species will be assumed and Mitigation Measure BIO-2a will be implemented. If protocol-level surveys are conducted and California red-legged frogs are not detected within the treatment areas, then no mitigation for the species will be required and avoidance buffers (as required in Mitigation Measures Bio-2a) will not be required. If California red-legged frog is detected or assumed present, Mitigation Measure BIO-2a will be implemented.</li> <li>▶ A qualified RPF or qualified biologist will conduct protocol-level surveys for California tiger salamander pursuant to the Interim Guidance of Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (CDFW 2003) within habitat potentially suitable for the species, or presence of the species will be assumed and Mitigation Measure BIO-2a will be implemented. If 2 consecutive years of protocol-level surveys are conducted and California tiger salamander is not detected within the treatment areas, then no mitigation for the species will be required. If California tiger salamander is detected or assumed present, Mitigation Measure BIO-2a will be implemented.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ To avoid impacts on western spadefoot, focused visual encounter surveys for western spadefoot and for potentially suitable burrows will be conducted within habitat areas suitable for the species prior to treatment activities within approximately 860 feet of aquatic habitat including seeps, wetlands, streams, ponds, or temporary pools including water-filled puddles and tire ruts less than 1,000 feet in elevation. If burrows potentially suitable for western spadefoot are detected, the qualified RPF or biological technician will inspect the burrow to determine whether it is occupied (e.g., using a burrow scope). If western spadefoot is identified during focused surveys or assumed present, Mitigation Measure BIO-2b for these species will be implemented.</li> <li>▶ To avoid impacts on western pond turtle, focused visual encounter surveys for the species and for potentially suitable burrows will be conducted within habitat areas suitable for the species prior to treatment activities within approximately 1,500 feet of aquatic habitat (i.e., streams, ponds). If upland habitat with suitable burrows/nest sites for western pond turtle is detected, the qualified RPF or biological technician will inspect the burrow to determine whether it is occupied (e.g., using a burrow scope). If western pond turtle is identified during focused surveys or assumed present, Mitigation Measure BIO-2b for these species will be implemented.</li> <li>▶ To avoid impacts on California glossy snake, coast horned lizard, and San Joaquin coachwhip, focused visual encounter surveys for the species will be conducted within habitat areas suitable for the species prior to treatment activities. If burrows potentially suitable for California glossy snake, coast horned lizard, and San Joaquin coachwhip are detected, the qualified RPF or biological technician will inspect the burrow to determine whether it is occupied (e.g., using a burrow scope). If California glossy snake, coast horned lizard, or San Joaquin coachwhip is identified during focused surveys, Mitigation Measure BIO-2b for these species will be implemented.</li> <li>▶ If the limited operating period for nesting birds is determined to be infeasible, to avoid impacts on special-status birds (i.e., American peregrine falcon, burrowing owl, golden eagle, grasshopper sparrow, loggerhead shrike, long-eared owl, Swainson’s hawk, tricolored blackbird, white-tailed kite, yellow warbler, and yellow-breasted chat), focused surveys (i.e., nest searches) for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season (January 15– August 31). If active special-status bird nests are observed during focused surveys, then Mitigation Measures BIO-2a (for American peregrine falcon, golden eagle, Swainson’s hawk, tricolored blackbird, and white-tailed kite) and BIO-2b (for burrowing owl, grasshopper sparrow, loggerhead shrike, long-eared owl, yellow warbler, and yellow-breasted chat) will be implemented.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ Because monarch may use habitat in the project area for large portions of the year, a limited operating period or no-disturbance buffer would not be feasible to avoid impacts on monarchs. Focused noninvasive visual surveys for butterflies will be conducted during the flight season or presence will be assumed. If the presence of monarch butterflies is assumed or the species is detected during focused surveys, Mitigation Measure BIO-2e will be implemented.</li> <li>▶ Because limited operating periods for special-status bumble bees are not feasible to avoid impacts on Crotch’s bumble bee, a focused survey for the species will be conducted prior to implementing treatments in habitat suitable for the species or presence will be assumed. The survey will be developed based on the CDFW publication Survey Considerations for CESA Candidate Bumble Bees (CDFW 2023). In addition, the survey protocol for rusty-patched bumble bee (USFWS 2018) may be adapted for the special-status bumble bees in the project area. If special-status bumble bees are detected during focused surveys or assumed to be present in the project area, Mitigation Measure BIO-2g will be implemented.</li> <li>▶ To avoid impacts on American badgers, a focused survey for the species and for potential dens will be conducted prior to implementing treatments in habitat suitable for the species (i.e., grassland, open woodland). If American badger dens are detected during focused surveys, Mitigation Measure BIO-2b will be implemented.</li> <li>▶ To avoid impacts on mountain lion, a focused survey for the species and for potential dens will be conducted by a qualified RPF or biological technician prior to implementing noise-generating manual treatments (e.g., using chainsaws), mechanical treatments, and prescribed burning within nursery habitat suitable for mountain lions. Nursery habitat suitable for the species will be determined through desktop analysis (e.g., land cover, slope, distance from development), coordination with local experts studying or tracking the species (if available), and field surveys. Potential mountain lion nursery dens will include caves, large natural cavities within rocky areas, or thickets deemed appropriate for use by mountain lions based on size and other characteristics (e.g., proximity to human development, surrounding habitat). The qualified wildlife biologist will survey for signs of mountain lion (e.g., tracks, scat, prey items) in the vicinity of potential nursery habitat to help determine whether an area may contain a mountain lion nursery.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ If signs of a mountain lion nursery are found during surveys or monitoring, further investigation will be required to determine if a mountain lion nursery is present. No treatment will occur in the area while further investigation is occurring. Survey methods will include the use of trail cameras, track plates, hair snares, and/or other noninvasive methods, as well as coordination with local experts tracking the species (if available). Surveys using these noninvasive methods will be conducted for 3 days and 3 nights to determine whether a nursery may be present. If mountain lion den is detected or assumed to be present during focused surveys, Mitigation Measure BIO-2a will be implemented.</li> <li>▶ If the limited operating period for ringtail is determined to be infeasible, to avoid impacts on the species, focused surveys for ringtail, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing mechanical treatments and prescribed burning during the ringtail maternity season (April 15–July 31). If presence of ringtail is assumed or an active den is identified during focused surveys by a qualified RPF or biological technician, Mitigation Measure BIO-2a will be implemented.</li> <li>▶ If the limited operating period for special-status bats is determined to be infeasible, to avoid impacts on special-status bats (i.e., pallid bat, Townsend’s big-eared bat, western mastiff bat, western red bat), focused surveys for maternity roosts of these species will be conducted prior to implementing manual, mechanical, and prescribed burning treatment activities during the bat maternity season (April 1–August 31). If special-status bat roosts are identified during focused surveys, Mitigation Measure BIO-2b for special-status bats will be implemented.</li> </ul>			
<p><b>SPR BIO-12. Protect Common Nesting Birds, Including Raptors.</b> The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist. If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDDB, eBird database, State Wildlife 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 would occur during the nesting</p>	<p>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 no more than 14 days prior to treatment. If an active nest is observed, implement avoidance strategies prior to and during treatment.</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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).</p> <p>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:</p> <ul style="list-style-type: none"> <li>▶ <b>Establish Buffer.</b> The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding will 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.</li> <li>▶ <b>Modify Treatment.</b> The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.</li> <li>▶ <b>Defer Treatment.</b> 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.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA/Addendum. After completion of the PSA/Addendum and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA/Addendum, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).</p> <p>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:</p> <ul style="list-style-type: none"> <li>▶ <b>Monitor Active Raptor Nest During Treatment.</b> A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases.</li> <li>▶ <b>Retention of Raptor Nest Trees.</b> Trees with visible raptor nests, whether occupied or not, will be retained.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements</b>			
<p><b>SPR GEO-1 Suspend Disturbance during Heavy Precipitation:</b> The project proponent will suspend mechanical, 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, and herbicide treatment activities and all treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <p>To prevent herbicides from being mobilized and soil from being compacted, which increases runoff and erosion risk, the project proponent will suspend mechanical and herbicide treatments if: (1) it is raining, (2) soils are saturated, and/or (3) soils are wet enough to mobilize herbicides or be compacted by mechanical activities. The project proponent will be prepared to completely suspend mechanical and herbicide treatment activities prior to the initiation of the rain event. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer very wet or saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of very wet or saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, (5) inadequate traction without blading wet soil or surfacing materials, or (6) tire track imprints or hoof marks in the soil. This SPR applies only to mechanical and herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR GEO-2 Limit High Ground Pressure Vehicles:</b> 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.</p>	During treatment	California State Parks	California State Parks
<p><b>SPR GEO-3 Stabilize Disturbed Soil Areas:</b> The project proponent will stabilize soil disturbed during mechanical 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 or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical 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.</p>	During mechanical and prescribed burn treatment activities that result in exposure of bare soil over 50 percent or more of the treatment area	California State Parks	California State Parks
<p><b>SPR GEO-4 Erosion Monitoring:</b> 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., <math>\geq 1.5</math> 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 and prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	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., greater than 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	California State Parks	California State Parks



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><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 954.6I of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.</p>	<p>During mechanical, manual, and prescribed burn treatment activities</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><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.</p>	<p>During mechanical, manual, and prescribed burn treatment activities</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>SPR GEO-7 Minimize Erosion:</b> To minimize erosion, the project proponent will:</p> <ol style="list-style-type: none"> <li>(1) Prohibit use of heavy equipment where any of the following conditions are present: <ol style="list-style-type: none"> <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> </ol> </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: <ol style="list-style-type: none"> <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> </ol> </li> </ol> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR GEO-8 Steep Slopes:</b> 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 identify measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil will 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.</p>	Prior to and during treatment on slopes greater than 50 percent	California State Parks	California State Parks
<b>Hazardous Material and Public Health and Safety Standard Project Requirements</b>			
<p><b>SPR HAZ-1 Maintain All Equipment:</b> 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.</p>	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	California State Parks	California State Parks
<p><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.</p>	During manual treatment activities	California State Parks	California State Parks
<p><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 will 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.</p>	During manual treatment activities	California State Parks	California State Parks
<p><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.</p>	During treatment	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR HAZ-5 Spill Prevention and Response Plan:</b> 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):</p> <ul style="list-style-type: none"> <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> <li>▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Prepare SPRP prior to any herbicide treatment activities; implement measures during herbicide treatment activities</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>SPR HAZ-6 Comply with Herbicide Application Regulations:</b> 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:</p> <ul style="list-style-type: none"> <li>▶ Be implemented consistent with recommendations prepared 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> <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> <li>▶ Be applied by an applicator appropriately licensed by the State.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Prior to and during herbicide treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR HAZ-7 Triple Rinse Herbicide Containers:</b> 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 watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations.</p> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	During herbicide treatment	California State Parks	California State Parks
<p><b>SPR HAZ-8 Minimize Herbicide Drift to Public Areas:</b> The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas:</p> <ul style="list-style-type: none"> <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> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	During herbicide treatment	California State Parks	California State Parks
<p><b>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas:</b> 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.</p>	Prior to and during herbicide treatment activities occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Hydrology and Water Quality Standard Project Requirements</b>			
<p><b>SPR HYD-1 Comply with Water Quality Regulations:</b> Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <p>Vegetation treatment activities may result in discharges to waters of the state; therefore; compliance with Water Code sections 13260(a)(1) and 13264 are required. The project proponent will use the State Water Board’s Vegetation Treatment General Order, which provides a mechanism for Water Code compliance for projects that prepare a PSA/Addendum. The project will be automatically enrolled (through implementation of SPR AD-7) in the State Water Board’s Vegetation Treatment General Order. The project’s automatic enrollment satisfies the requirements of SPR HYD-1.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>SPR HYD-2 Avoid Construction of New Roads:</b> The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:</b> 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.</p>	<p>Establish WLPZs during design of treatment project; implement WLPZ protections during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

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

Water Class	Class I	Class II	Class III	Class IV
<p>Water Class Characteristics or Key Indicator Beneficial Use</p>	<p>1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.</p>	<p>1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.</p>	<p>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.</p>	<p>Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.</p>

**WLPZ Width (ft) – Distance from top of bank to the edge of WLP**

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	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>The following WLPZ protections will be applied for all treatments:</p> <ul style="list-style-type: none"> <li>▶ 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).</li> <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> <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> <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> <li>▶ Burn piles will be located outside of WLPZs.</li> <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> <li>▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.</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> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <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 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p><b>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:</b> The project proponent will implement the following measures when applying herbicides:</p> <ul style="list-style-type: none"> <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> <li>▶ 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.</li> <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> <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> <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>	<p>During herbicide treatment activities</p>	<p>California State Parks</p>	<p>California State Parks</p>



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.</p> <p>This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.</p>			
<p><b>SPR HYD-6 Protect Existing Drainage Systems:</b> 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.</p>	<p>Mark existing stormwater drainage infrastructure prior to ground disturbing activities; if a drainage structure or infiltration system is inadvertently disturbed or modified during treatment, repair damage and restore pre-project drainage conditions</p>	<p>California State Parks</p>	<p>California State Parks</p>
<b>Noise Standard Project Requirements</b>			
<p><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. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><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.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>SPR NOI-3 Engine Shroud Closure:</b> The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.</p>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><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.</p>	During treatment	California State Parks	California State Parks
<p><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.</p>	During treatment	California State Parks	California State Parks
<p><b>SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:</b> 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.</p>	Prior to mechanical treatment activities within 1,500 feet of noise-sensitive receptors	California State Parks	California State Parks
<b>Recreation Standard Project Requirements</b>			
<p><b>SPR REC-1 Notify Recreational Users of Temporary Closures.</b> 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.</p>	If a temporary closure of a public recreation area or facility is required, post notifications at least 14 days prior to treatment	California State Parks	California State Parks
<b>Transportation Standard Project Requirements</b>			
<p><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</p>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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 will be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p>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.</p>	<p>Prepare TMP prior to treatment and implement during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<p><b>Public Services and Utilities Standard Project Requirements</b></p>			
<p><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 initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, 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.</p>	<p>Prepare an Organic Waste Disposition Plan prior to mechanical or manual treatment activities; implement plan during mechanical or manual treatment activities</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Aesthetics</b>			
<p><b>Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks</b></p> <p>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.</p> <p>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.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>
<b>Air Quality</b>			
<p><b>Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</b></p> <p>Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not be 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.</p>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Techniques for reducing emissions may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <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 criteria: <ul style="list-style-type: none"> <li>▪ meet California’s Low Carbon Fuel Standards and be certified by CARB Executive Officer;</li> <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> <li>▪ contain no fatty acids or functionalized fatty acid esters; and</li> <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> </li> <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>	<p>During treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Archaeological, Historical, and Tribal Cultural Resources</b>			
<p><b>Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</b></p> <p>If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.</p>	During ground-disturbing activities	California State Parks	California State Parks
<b>Biological Resources</b>			
<p><b>Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA</b></p> <p>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</p>	Prior to and during treatment	California State Parks	California State Parks

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.</p> <p>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.</p> <p>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.</p>			
<p><b>Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</b></p> <p>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:</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <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 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.</li> <li>▶ 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.</li> <li>▶ 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 will need to be modified or precluded from implementation.</li> <li>▶ No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.</li> </ul> <p>A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-</p>			



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p>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.</p> <p><b>Project-Specific Implementation.</b></p> <ul style="list-style-type: none"> <li>▶ If special-status plant species are detected during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which treatments will not occur (exceptions to this buffer are described below for Mount Diablo and Contra Costa manzanita).</li> <li>▶ If special-status plant species are detected during protocol-level surveys, an evaluation of the appropriate treatment design and frequency to maintain habitat function within habitat suitable for special-status plants will be carried out by a qualified RPF, biologist, 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.</li> </ul> <p>Mount Diablo and Contra Costa Manzanita</p> <p>The project proponent will avoid adverse effects to Mount Diablo manzanita and Contra Costa manzanita by implementing the following strategies that are applicable to manual treatment, mechanical treatment, and prescribed burning, if feasible:</p> <ul style="list-style-type: none"> <li>▶ Areas with known Mount Diablo and Contra Costa manzanita shrubs will be broadcast burned within their natural fire return interval of 30 to 125 years (e.g., areas within the Curry fire perimeter will not be broadcast burned). No maintenance prescribed burning will occur in these areas prior to a minimum of 30 years since the last burn.</li> </ul>			

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<ul style="list-style-type: none"> <li>▶ The recommended buffer may be reduced or eliminated for Mount Diablo and Contra Costa manzanita because a qualified biologist reviewed and provided substantial evidence that these species would benefit from prescribed burning treatments conducted within the species’ normal fire return interval (See PSA Section 4.5 Impact BIO-1 for an analysis of benefits of prescribed burning on Mount Diablo Manzanita and Contra Costa manzanita).                             <ul style="list-style-type: none"> <li>▪ Mount Diablo manzanita and Contra Costa manzanita do not require a 50-foot buffer for manual and mechanical treatments where initial treatment is required to safely initiate prescribed broadcast burning, such as for the creation of control lines or to reduce fuel loading prior to prescribed burning.</li> <li>▪ Mount Diablo manzanita and Contra Costa manzanita do not require a 50-foot buffer for prescribed broadcast burn treatments.</li> </ul> </li> <li>▶ <b>Manzanita pile burn strategy:</b> If feasible, pile burning will occur beyond 50 feet of Diablo manzanita or Contra Costa manzanita plants. If site conditions make the 50-foot buffer infeasible, a qualified botanist, biologist, or RPF will develop and implement a strategy for pile burning in proximity to sensitive manzanitas that avoids or minimizes the damage sufficiently to support retention of the seed bank’s natural functions. The goal of this pile burn strategy will be to retain a plentiful seed bank for these manzanita species, which is essential for the population to regenerate after a prescribed broadcast burn.                             <p style="margin-left: 20px;">Manzanita pile burn strategies may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>▪ Piles will be located as far from sensitive manzanita individuals as possible, with preference for placement in areas where the seed bank for sensitive manzanita is likely reduced, such as in an existing road or outside of the boundary of chaparral habitat.</li> <li>▪ The number of burn piles will be minimized per acre to a level appropriate based on the site conditions (e.g., one to two piles per acre).</li> <li>▪ When pile burning is phased across several separate burning sessions, new burn piles will be placed in the location of previous burn piles.</li> <li>▪ Feasible measures will be implemented to minimize soil heating (e.g., burn piles will be extinguished after 8 hours of burning; Busse et. al., 2013).</li> <li>▪ Post-treatment monitoring will document manzanita survival and regeneration in the areas surrounding burn piles.                                     <ul style="list-style-type: none"> <li>• Test plots with pile burning followed by broadcast burning will be conducted to document manzanita survival and regeneration in the area.</li> <li>• If monitoring shows rare manzanitas are not regenerating as expected, CSP will consider adoption of adaptive maintenance treatment.</li> </ul> </li> </ul> </li> </ul>			

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<p>The current available scientific research will be used to develop strategies for pile burning in areas where Contra Costa manzanita and Mount Diablo manzanita are present.</p> <p>A summary of the manzanita pile burn strategy will be included in the post-project implementation report (i.e., completion report) required by SPR AD-7.</p> <ul style="list-style-type: none"> <li>▶ If these measures are not feasible and significant impacts remain, Mitigation Measure BIO-1c will apply.</li> </ul>			
<p><b>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)</b></p> <p>If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), or if the species is assumed present, the project proponent will avoid adverse effects to the species by implementing the following.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <p>The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:</p> <ol style="list-style-type: none"> <li>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</li> <li>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.</li> </ol> <ul style="list-style-type: none"> <li>▶ 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.</li> </ul> <p>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.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

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<p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> <li>▶ The project proponent will design 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 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.                             <ul style="list-style-type: none"> <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 association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.</li> </ul> </li> </ul> <p>A qualified RPF or biologist of the lead agency will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If the lead agency determines after consultation that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.</p> <p><b>Project-Specific Implementation</b></p> <p>If California Fully Protected Species or species listed under ESA or CESA are observed during focused or protocol-level surveys (conducted pursuant to SPR BIO-10) or assumed present, the project proponent will avoid adverse effects to the species by implementing the following.</p>			

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<p><u>Special-Status Reptiles and Amphibians</u></p> <p>The following measures apply to a variety of sensitive reptiles and amphibians with potential to occur in the project area:</p> <ul style="list-style-type: none"> <li>▶ <b>Check Equipment:</b> All contractors, their employees, and agency personnel involved in the implementation of the project will check for the presence of Alameda whipsnake, California red-legged frog, and California tiger salamander, or other sensitive wildlife under or next to stationary vehicles prior to operating their vehicles. If a special-status reptile or amphibian is found, the qualified RPF or biological technician will determine necessary next steps to avoid impact.</li> <li>▶ <b>Pile Burning:</b> If pile burning is implemented, piles will be placed away from mammal burrows, rock outcrops, or scrub habitat that could serve as refugia for Alameda whipsnake, California tiger salamander, or California red-legged frog.                             <ul style="list-style-type: none"> <li>▪ Burn piles will be burned gradually and lit from one end (the uphill side on slopes) to allow Alameda whipsnake, California tiger salamander, or California red-legged frogs that may be using the pile for refuge to escape.</li> <li>▪ When feasible, a single pile will be ignited, and all other piles in the vicinity of the burning pile will be carried to the burning pile and burned in the same location as the initial burn pile. When feasible, this strategy would minimize risk to wildlife using piles for refuge.</li> </ul> </li> <li>▶ <b>Understory Vegetation Treated First:</b> Whenever feasible in forested environments adjacent to scrublands (for Alameda whipsnake and California red-legged frog) or in oak woodland or grasslands (for California tiger salamander and California red-legged frog), understory vegetation will be removed first, followed by trees, to facilitate visibility of sensitive reptiles and amphibians by a qualified RPF or biological technician.                             <ul style="list-style-type: none"> <li>▪ Refugia habitat:                                     <ul style="list-style-type: none"> <li>• Treatment activities will avoid burrows and potential refugia habitat, as feasible.</li> <li>• Heavy equipment including front-loaded mastication equipment which may collapse burrows will occur exclusively from compacted surfaces (established roads and trails).</li> <li>• Mechanized equipment which may cause burrow collapse (tracked heavy equipment, trucks, and bulldozers) will not be driven within 50 feet of mammal burrows in open grassland, savannah, or oak woodland within 1.3 mile of suitable breeding habitat for California tiger salamander. Manual treatment or herbicide application may occur within this buffer.</li> </ul> </li> </ul> </li> </ul>			

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<ul style="list-style-type: none"> <li>• Burn piles will not be placed on mammal burrows which occur in oak woodland, grassland, or savannah within suitable upland, breeding, core, dispersal, or foraging habitat for Alameda whipsnake, California red-legged frog, or California tiger salamander.</li> <li>▶ <b>Sensitive species avoided:</b> If any sensitive wildlife individuals are observed during project activities or enter the project area (i.e., Alameda whipsnake, California tiger salamander, California red-legged frog), all work will stop within a no-disturbance buffer of 100 feet around the individual unless the qualified RPF or biological technician determines that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own and the occurrence will be reported to the qualified RPF or biological technician.</li> </ul> <p><u>Alameda whipsnake</u></p> <p>Alameda whipsnake will generally be assumed present in all scrub communities, adjacent grasslands, adjacent woodlands, and open woodland habitat.</p> <p>Avoidance of mortality or disturbance to individual Alameda whipsnakes will be achieved through the following strategies, which are applicable to manual treatment, mechanical treatment, and prescribed burning:</p> <ul style="list-style-type: none"> <li>▶ <b>Pre-treatment survey:</b> A qualified RPF or biological technician will conduct a pre-treatment visual clearance survey for Alameda whipsnake immediately prior to manual, mechanical, broadcast burn, and pile burn treatment activities occurring in suitable habitat (scrub habitat, adjacent grassland, and open woodland) each day. Survey methodology would conform with techniques discussed in <i>Alameda Whipsnake (Masticophis lateralis euryxanthus) 5-year Review: Summary and Evaluation (USFWS 2011) and Habitat Use and Management Considerations for the Threatened Alameda whipsnake (Masticophis lateralis euryxanthus) in Central California</i> (Miller and Alvarez 2016).</li> <li>▶ <b>Biological Monitor:</b> With authorization of funding from CSP, a qualified RPF or biological technician will monitor all manual and mechanical treatment activities and prescribed burning. The monitor will conduct ongoing surveys ahead of all manual and mechanical work in suitable chaparral and coastal scrub habitat areas. Survey methodology will be adapted from techniques discussed in <i>"Alameda Whipsnake (Masticophis lateralis euryxanthus) 5-year Review: Summary and Evaluation"</i> (USFWS 2011) and <i>"Habitat Use and Management Considerations for the Threatened Alameda whipsnake (Masticophis lateralis euryxanthus) in Central California"</i> (Miller and Alvarez 2016).</li> </ul>			

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<ul style="list-style-type: none"> <li>▪ Ongoing surveys will be conducted throughout the day ahead of vegetation removal to ensure that the species is not present prior to the start of work.</li> <li>▪ The qualified biological monitor will visually survey refugia on the ground, branches and brush, and vegetative canopy for Alameda whipsnake that could be present.</li> <li>▪ When dense vegetation inhibits visual survey effectiveness, the biologist will work closely with the crew to ensure all cut vegetation is surveyed prior to manual and mechanical removal; the crew and biologist will continuously switch between removing a small amount of vegetation, then surveying the next visible patch of vegetation.</li> <li>▪ If work ceases for up to one hour, the area will be re-surveyed prior to returning to work. If the qualified RPF or biological technician deems the area to be highly suitable habitat for Alameda whipsnake, they may require that the crew cuts the upper half of the canopy, pauses for survey, and then removes the lower portion of the canopy.</li> <li>▪ During this pre-activity visual clearance survey effort, the biologist will advise the crew on avoidance of potential refugia such as burrows and rock piles.</li> <li>▪ Vehicle Collisions Risk Minimization:               <ul style="list-style-type: none"> <li>• Speed limit of 15 mph for all vehicle movement on unpaved areas.</li> <li>• Operators of vehicles and equipment will avoid collisions with wildlife including snakes. The qualified RPF, biologist, and crews will frequently check for injured or killed wildlife in the path of vehicles driving within the project area.</li> <li>• If burrows are present in unpaved roads or road shoulders, they will be marked with high-visibility flagging or spray paint and a qualified RPF or biological technician will inspect burrows before heavy machinery or vehicles drives over burrows, and at the end of each work day</li> <li>• If any equipment or vehicle’s windshield is blocked by dirt, debris, or other material sufficient to impair visibility, the driver will stop the vehicle and clear debris until there is full visibility.</li> <li>• If any wildlife is inadvertently injured or killed by any project activities involving vehicle collision, the qualified RPF or biological technician will immediately be informed and the injured or killed animal will be documented and reported to CSP’s Diablo Range District. If it is determined that the injured or killed animal is state or federally listed, CSP will provide all relevant reports and photographs to CDFW and/or USFWS.</li> </ul> </li> </ul>			

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<ul style="list-style-type: none"> <li>▶ <b>Seasonal Restrictions:</b> In habitat suitable for Alameda whipsnake suitable winter retreats (e.g., within native scrub habitat, rock outcrops within approximately 50 feet of scrub habitat), as determined by a qualified RPF or biological technician, treatment activities involving heavy equipment and ground disturbance will not occur between approximately November 1 and March 31 (as determined by a qualified RPF or biological technician based on temperature and weather conditions) in order to avoid potential disturbance of hibernating Alameda whipsnake. Manual treatment involving hand crews (i.e., work with hedge trimmers, hand-held chainsaws, weed-whippers, etc.), prescribed burning, or mechanical treatment if heavy machinery can be operated without ground disturbance from an existing road or other disturbed area devoid of burrows or rock piles (e.g., use of an articulating arm masticator operated from an existing road or other disturbed, compacted area that contains no burrows or potential hibernaculum may be implemented during hibernating season.</li> <li>▶ <b>Temperature Restrictions:</b> Mechanical vegetation removal will be restricted to when temperatures are conducive to Alameda whipsnake movement. Within areas determined by the qualified RPF or biological technician to be suitable Alameda whipsnake habitat, mechanical treatment and prescribed burning will be avoided when temperatures are determined by the qualified RPF or biological technician to be too low for Alameda whipsnake movement. Manual treatments may occur in cooler conditions, after the qualified RPF or biological technician has thoroughly surveyed the area.             <ul style="list-style-type: none"> <li>▪ Alameda whipsnake movement is likely when cloud cover, wind, and microhabitat features are favorably warm, and when outdoor temperatures are above 45 to 55 degrees F, or when conditions are reflective of the best available current research on Alameda whipsnake movement. No mechanical vegetation removal would occur in Alameda whipsnake core scrub habitat (as determined by the qualified RPF or biological technician) when outdoor temperatures are below 45 degrees F.</li> </ul> </li> <li>▶ <b>Debris Management:</b> Contractors will immediately (i.e., the same day) process (i.e., remove completely from the treatment area, chip, permanently place within the treatment area for soil stabilization) all cut materials (i.e., brush, stems, slash, logs) as they are produced to avoid attracting Alameda whipsnake to the vegetation piles, to the extent feasible. If processing within the same day is not feasible, the on-site biologist will advise crews on suitable location(s) outside of suitable scrub and directly adjacent woodland/grassland habitat (e.g., within landings or temporary refuge areas) for temporary storage of cut materials that cannot be processed immediately.</li> </ul>			



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<ul style="list-style-type: none"> <li>▪ Chips will not be spread on burrows, rock outcrops, or other features that may be used as wildlife refugia. Chips will be spread on the ground to the specified depth limit and will not be sprayed on vegetation. No chips will be spread in native perennial grassland habitat or in habitat identified by a qualified RPF or biological technician as Alameda whipsnake core scrub habitat.</li> <li>▪ Chip placement will be evaluated by a qualified RPF or biological technician during the post-treatment inspection of the project area. The assessment will include a review of chip depth, chip percent cover, and effective avoidance of burrow, rock outcrops, native grassland, and Alameda whipsnake core scrub habitat. If chips are found to exceed depth limits or percent cover of the project area, crews will return to the site and will move chips until the chip placement objectives are achieved.</li> <li>▪ If pile burning in habitat determined to be suitable for Alameda whipsnake, piles should be disturbed or dismantled prior to ignition to allow any potential Alameda whipsnakes taking refuge in the pile to leave on their own volition.</li> </ul> <p>Habitat function will be maintained for Alameda whipsnake through the following strategies:</p> <ul style="list-style-type: none"> <li>▶ <b>Create Shrub Islands:</b> Vegetation removal in coastal scrub and chaparral habitat will be designed to create shrub islands. This includes all types of coastal scrub and chaparral, including coyote brush scrub. Shrub islands are described based on the USFWS definition of Alameda whipsnake “core” habitat use areas (USFWS 2000).             <ul style="list-style-type: none"> <li>▪ Shrub vegetation patches that are at least 0.5 acre in size, or 0.2 acre in size but within 50 feet of another patch of scrub at least 0.5 acre in size, will be retained.</li> <li>▪ Vegetation removal activities will retain patches of coastal scrub and chaparral in irregular, oblong shapes that maintain a natural looking condition on the landscape.</li> </ul> </li> <li>▶ <b>Protection of Refugia Habitat:</b> Rock outcroppings, mammal burrows, and native shrubs within 50 feet of rock outcroppings that are suitable Alameda whipsnake refugia (as determined by the qualified RPF or biological technician) will be maintained and protected from vehicles.             <ul style="list-style-type: none"> <li>▪ Wood chips and debris will not be placed within 50 feet of rock outcroppings.</li> <li>▪ Cut and chipped material will not be spread on any mammal burrows or rock outcrops and will not be placed on top of vegetation in scrub habitat.</li> </ul> </li> </ul> <p><u>California red-legged frog and California tiger salamander</u></p> <p>If California red-legged frog or California tiger salamander are assumed present or detected during protocol-level surveys, the following measures will be implemented:</p>			

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<p>▶ Mechanized operations will be shut down when the precipitation threshold is met, pursuant to SPR GEO-1, and the shutdown period will begin once the precipitation event has ended.</p> <p><u>California Red-Legged Frog</u></p> <p>▶ During the dispersal season from October 15 (or after the first rainfall of the year) through April 15, pre-treatment visual surveys will be performed daily by a qualified RPF, biologist, or biological monitor, prior to implementation of any treatment activities (i.e., mechanical, manual, and herbicide) within breeding, upland, or dispersal habitat as determined by a qualified RPF or biological technician. If a California red-legged frog is found during pre-activity surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless the qualified RPF or biological technician determines that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own and the occurrence will be reported to the qualified RPF or biological technician and USFWS.</p> <ul style="list-style-type: none"> <li>▪ If California red-legged frog is found during pre-activity surveys, which will be conducted by a qualified RPF or biological technician, or enters the project site during treatment activities, the specific habitat features (i.e., log, tree, debris pile) used by the frog when detected will be evaluated by a qualified RPF or biological technician for habitat retention, if habitat retention is achievable while meeting the project goals.</li> <li>▪ All herbicide use during project implementation will comply with the herbicide use restrictions in the stipulated injunction issued by the Federal District Court for the Northern District of California to resolve the 2006 case brought against the Environmental Protection Agency by the Center for Biological Diversity. For example, to comply with the injunction, only cut stump and basal bark applications will be allowed in California red-legged frog habitat under the following conditions.</li> <li>▪ Cut stump and basal bark applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat.</li> <li>▪ If operators need to move or treat large woody debris greater than 12 inches in diameter, that piece of woody debris will be evaluated for the presence of California red-legged frog by a qualified biological technician, qualified professional, qualified RPF, RPF supervised designee, or a contractor who has been through the environmental awareness training.</li> </ul>			

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<p><u>California Tiger Salamander</u></p> <p>If the presence of California tiger salamander within suitable upland habitat (defined as oak woodland and grasslands within 1.3 mile of suitable aquatic habitat) in the project area is assumed or if SPR BIO-10 surveys have detected California tiger salamander, CSP will implement the following measures:</p> <ul style="list-style-type: none"> <li>▶ Year round, pre-activity visual surveys will be performed daily by a qualified RPF, biologist, or biological technician, prior to implementation of any treatment activities (i.e., mechanical, manual, and herbicide) within breeding, upland, or dispersal habitat as determined by a qualified RPF or biological technician. If a California tiger salamander is found during pre-activity surveys or enters the project site during treatment activities, all work will stop within a non-disturbance buffer of 100 feet around the individual unless it is determined by the qualified RPF or biological technician that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Treatment activities will cease within the buffer until the animal leaves on its own and the occurrence will be reported to the qualified RPF or biological technician.</li> </ul> <p><u>Special-status Birds</u></p> <ul style="list-style-type: none"> <li>▶ If active special-status bird nests are detected during focused surveys, a no-disturbance buffer of at least 1 mile will be established around active nests for golden eagle, 0.5 mile for American peregrine falcon, 0.25 mile for white-tailed kite nests, and at least 100 feet around the nests of other special-status birds, and no treatment activities will occur within this buffer until the chicks have fledged, or the nest is otherwise no longer active, as determined by a qualified RPF or biological technician.</li> <li>▶ Additionally, trees containing golden eagle nests will not be removed pursuant to the Bald and Golden Eagle Protection Act.</li> <li>▶ If helicopters are used for prescribed burning activities:             <ul style="list-style-type: none"> <li>▪ The helicopter landing site will be selected in coordination with a qualified RPF or biological technician to minimize impacts on wildlife;</li> <li>▪ Helicopters will comply with recommendations of the Rotorcraft Bird Strike Working Group (FAA 2017), which vary based on the equipment being operated. These restrictions include seasonal restrictions (avoid flight during the nesting season, January 15-August 31), altitude restrictions (when feasible, helicopters should travel at altitudes exceeding 3,500 above ground level), and airspeed restrictions (below 80 knots); and</li> <li>▪ If additional conditions are present which may reasonably result in adverse impacts of helicopters on soaring birds (i.e., the discovery of nesting raptors outside of the typical nesting season within the helicopter flight path), further consultation may be conducted with CDFW.</li> </ul> </li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><u>Mountain Lion</u></p> <p>To avoid mortality or injury to mountain lion the following will be implemented.</p> <ul style="list-style-type: none"> <li>▶ If a nursery is known to occur in the area or further signs of a nursery are detected based on the surveys described under SPR BIO-10 (e.g., lactating adult females or cubs on camera, repeated detections of an adult female in the area, growls or calls from cubs), CSP will implement a no-disturbance buffer of at least 2,000 feet (Wilmers et al. 2013) for a minimum of 10 weeks. Treatment activities will not occur within this buffer during this time to avoid disturbance, injury, or mortality of mountain lion nurseries.</li> </ul> <p><u>Ringtail</u></p> <p>If the limited operating period for ringtail is determined to be infeasible and ringtails are assumed present or detected during focused surveys implemented under SPR BIO-10, then the following avoidance and minimization measures will be required for mechanical and prescribed burning treatment activities:</p> <ul style="list-style-type: none"> <li>▶ <b>Year-Round Take Avoidance Measures.</b> During mechanical treatment activities in heavy brush habitat (e.g., dense conifer saplings, blackberry, shrubs), and after the standard equipment warm-up period, heavy machinery activities in heavy brush habitat will be conducted slowly and cautiously. For example, the head of a masticator will pause above a patch of heavy brush for several seconds before removing the brush. A qualified RPF or biological technician will explain this process to contractors and will observe mechanical treatments on the first day of work to ensure that the methods are understood and implemented properly; this could be combined with other pre-activity survey or contractor awareness training requirements. Contractors will watch for ringtail as they masticate in heavy brush. If a ringtail is observed, the contractor will direct treatment activities to halt, and the ringtail will be allowed to leave the area unharmed before treatment begins. If a ringtail is observed outside of maternity season, the qualified RPF or biological technician will be contacted and will perform a sweep of the treatment area before work resumes. If the qualified RPF or biological technician observes a resting ringtail or active non-maternity den, treatment activities will not occur within that day's treatment area until the ringtail leaves the area on its own. If the qualified RPF or biological technician observes a ringtail or confirms the contractor's observation (i.e., based on contractor description or photograph), the occurrence will be reported to CDFW (Katanja.Waldner@wildlife.ca.gov or R3Timber@wildlife.ca.gov).</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ <b>Den Surveys.</b> Within seven days prior to the start of mechanical and prescribed burning treatments during the ringtail maternity season (April 15-July 31), a qualified RPF or biological technician will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biological technician will search for large trees (i.e., greater than 12 inches diameter at breast height [dbh]) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified RPF or biological technician will inspect the cavity using a cell phone with a flash, or other tools (e.g., borescopes) to determine whether ringtails are present. Areas with appropriate den habitat (e.g., large trees), occupied or not, will be marked (e.g., with flagging, spray paint), for inspection during future sweeps (as described below). The qualified RPF or biological technician will also search for dens in dense brush habitat before mechanical and prescribed burning treatments and will note any sightings of fleeing adult ringtails.</li> <li>▶ <b>Active Dens.</b> If active ringtail dens are discovered during a den survey or daily sweep, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and mechanical and prescribed burning treatments will not proceed within the buffer until at least the end of the ringtail maternity season (July 31). The qualified RPF or biological technician will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer will incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW (Katanja.Waldner@wildlife.ca.gov or R3Timber@wildlife.ca.gov) will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer.</li> <li>▶ <b>Daily Sweeps.</b> If active ringtail dens are not discovered, daily sweeps will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search as well as take of adult ringtails and kits.             <ul style="list-style-type: none"> <li>▪ Prior to the start of work for mechanical treatments, a qualified RPF or biological technician will conduct a sweep of the area to be treated and will search all habitat suitable for ringtails where mastication will occur (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 biological technician. Each day, a trained contractor will search all areas previously marked by the qualified RPF or biological technician for active dens (see training requirements below under "Training and Monitoring").</li> </ul> </li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ Before a prescribed burn, a qualified RPF or biological technician will search all habitat suitable for ringtails that would be burned (i.e., heavy brush, burn piles, large trees).</li> <li>▪ If an active den is discovered during a daily sweep, the qualified RPF or biological technician 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.</li> <li>▶ <b>Training and Monitoring.</b> On the first morning of work for mechanical treatments and before a prescribed burn is initiated, 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 biological technician will provide additional training specific to ringtail that will include the following elements:             <ul style="list-style-type: none"> <li>▪ Description of ringtail appearance (i.e., physical features, typical size); description of typical ringtail behavior; and 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 biological technician can conduct a den search and sweep; if the qualified RPF or biological technician observes a ringtail or confirms the contractor’s observation, the occurrence will be reported to CDFW at Katanja.Waldner@wildlife.ca.gov or R3Timber@wildlife.ca.gov );</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 Katanja.Waldner@wildlife.ca.gov or R3Timber@wildlife.ca.gov) include the following circumstances: ringtails observed during treatment activities (notify within 3 business days); and active ringtail den discovered (notify within 24 hours); and take of ringtail occurs (notify within 24 hours).</li> </ul> </li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</b></p> <p>If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <ul style="list-style-type: none"> <li>▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:</li> <li>▶ 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).</li> <li>▶ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other</li> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> <li>▶ 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.</li> </ul> <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> <li>▶ For all treatment activities, the project proponent will design 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 species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked, and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.</li> <li>▶ 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.</li> <li>▶ 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.</li> </ul>			



Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <ul style="list-style-type: none"> <li>▶ 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/Addendum. 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.</li> <li>▶ 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.</li> <li>▶ 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.</li> </ul> <p>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</p>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>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/Addendum. 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.</p> <p><b>Project-Specific Implementation</b></p> <p>If other (i.e., non-listed) special-status wildlife species are observed during focused or protocol-level surveys (conducted pursuant to SPR BIO-10), or the species is assumed to be present in lieu of conducting surveys, the project proponent will avoid or minimize adverse effects on the species by implementing the following.</p> <ul style="list-style-type: none"> <li>▶ <b>Check Equipment:</b> All contractors, their employees, and agency personnel involved in the implementation of the project will check for the presence of sensitive wildlife under or next to stationary vehicles prior to operating their vehicles. If a special-status reptile or amphibian is found, the qualified RPF or biological technician will determine necessary next steps to avoid impact.</li> <li>▶ <b>Protection of burrows and refugia habitat:</b> The following measures will be conducted in suitable upland habitat for western pond turtle, western spadefoot, California glossy snake, coast horned lizard, San Joaquin coachwhip, as identified by a RPF or qualified biologist:</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ Mastication activities will occur exclusively from compacted surfaces (established roads and trails).</li> <li>▪ Mechanized equipment which may cause burrow collapse (tracked heavy equipment, trucks, and bulldozers) will not be driven within 50 feet of mammal burrows in open grassland, savannah, or oak woodland. Manual treatment or herbicide application may occur within this buffer.</li> <li>▪ Burn piles will not be placed on mammal burrows.</li> <li>▶ If California glossy snake, coast horned lizard, San Joaquin coachwhip, western pond turtle or western spadefoot is detected during focused surveys, the project proponent will require flagging areas for avoidance in which no treatment activities will occur, biological monitoring, or other measures recommended by CDFW as necessary to avoid injury to or mortality of these species. If impacts will remain significant under CEQA and the project proponent determines that additional mitigation is necessary to reduce significant impacts, Mitigation Measure BIO-2c will be required, and incidental take permitting under CESA may be required pursuant to consultation with CDFW.</li> <li>▶ If active special-status bird nests are detected during focused surveys, a no-disturbance buffer of at least at least 0.5 mile will be established around American peregrine falcon and golden eagle nests, 0.25 mile for white-tailed kite nests, and at least 100 feet around the nests of other special-status birds, and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biological technician.</li> <li>▶ If active burrowing owl burrow is detected during the nesting season (April 1 – August 15) during SPR BIO-10 surveys, a no-disturbance nest buffer of 660 feet will be placed around active burrowing owl burrows. If the burrow is active during the overwintering season (October 16 – March 31), a no-disturbance nest buffer of 330 feet will be places around the burrow. No treatment activities would occur within this buffer until all burrowing owls have left the burrow as determined by a qualified biological technician or RPF. These buffer distances are recommended per the CDFW staff report on burrowing owl mitigation (CDFW 2012). The buffer distance may be modified by a qualified RPF or biological technician based on presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, and expected treatment activities.</li> <li>▶ If American badger is detected during focused surveys or assumed present, a no-disturbance buffer will be established around the den or habitat assumed to be occupied, the size of which will be determined by the qualified RPF or biological technician, and no treatment activities will occur within this buffer.</li> </ul>			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ If special-status bat roosts are identified during focused surveys, a no-disturbance buffer of 250 feet will be established around active pallid bat, Townsend’s big-eared bat, western mastiff bat, and western red bat roosts and mechanical treatments, manual treatments, and pile burning will not occur within this buffer.</li> </ul>			
<p><b>Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)</b></p> <p>If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>▶ Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34).</li> <li>▶ Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants.</li> <li>▶ Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year.</li> <li>▶ Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed, and untreated portions of suitable habitat are retained.</li> </ul> <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p>			
<p><b>CESA and ESA Listed Species.</b> A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, disturbance of listed butterflies, or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

**Table 3.6-34 Special-status Butterflies and Associated Host Plants**

Butterfly Species	Host Plants
bay checkerspot butterfly	dwarf plantain ( <i>Plantago virginica</i> ), purple owl's clover ( <i>Castilleja exserta</i> )
Behren's silverspot butterfly	blue violet ( <i>Viola adunca</i> )
callippe silverspot butterfly	California golden violet ( <i>Viola pedunculata</i> )
Carson wandering skipper	salt grass ( <i>Distichlis spicata</i> )
El Segundo blue butterfly	seacliff buckwheat ( <i>Eriogonum parvifolium</i> )
Hermes copper butterfly	spiny redberry ( <i>Rhamnus crocea</i> )
Kern primrose sphinx moth	plains evening-primrose ( <i>Camissonia contorta</i> ), field primrose ( <i>Camissonia campestris</i> )
Laguna Mountains skipper	Cleveland's horkelia ( <i>Horkelia clevelandii</i> ), sticky cinquefoil ( <i>Drymocallis glandulosa</i> )
Lange's metalmark butterfly	naked-stemmed buckwheat ( <i>Eriogonum nudum</i> )
lotis blue butterfly	seaside bird's foot trefoil ( <i>Hosackia gracilis</i> )
Mission blue butterfly	lupine ( <i>Lupinus</i> spp.)
Myrtle's silverspot butterfly	blue violet
Oregon silverspot butterfly	blue violet
Palos Verdes blue butterfly	Santa Barbara milkvetch ( <i>Astragalus trichopodus</i> ), common deerweed ( <i>Acmispon glaber</i> )
San Bruno elfin butterfly	broadleaf stonecrop ( <i>Sedum spathulifolium</i> ), manzanita ( <i>Arctostaphylos</i> spp.), huckleberry ( <i>Vaccinium</i> spp.)
Smith's blue butterfly	seacliff buckwheat, seaside buckwheat ( <i>Eriogonum latifolium</i> )
Quino checkerspot butterfly	dwarf plantain, purple owl's clover

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Other Special-status Species.</b> A qualified RPF or biologist with knowledge of the special-status 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 species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies 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.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, 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). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p> <p><b>Project-Specific Implementation</b></p> <p>To avoid impacts on monarch butterfly, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>▶ Treatments will be designed to retain milkweed (<i>Asclepias</i> spp.) plants in the project area as feasible. Large patches of milkweed plants in a treatment area will be marked with high-visibility flagging, fencing, stakes, or other methods, and these plants will not be removed or trampled during treatment activities.</li> <li>▶ Broadcast burning and mowing in habitat suitable for monarch will be restricted to October 31-March 15.</li> <li>▶ Treatments will be conducted in a patchy pattern in habitat suitable for monarch, such that the entirety of the habitat is not burned or removed, and untreated portions of suitable habitat are retained.</li> </ul>			

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)</b></p> <p>If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible:</p> <ul style="list-style-type: none"> <li>▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season.</li> <li>▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area.</li> <li>▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area).</li> <li>▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September).</li> </ul> <p><b>CESA and ESA Listed Species.</b> A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed), or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p><b>Other Special-status Species.</b> A qualified RPF or biologist with knowledge of the special-status 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</p>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>special-status species’ habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be 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.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, 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 bumble bees, no compensatory mitigation will be required.</p> <p><b>Project-Specific Implementation</b></p> <p>To avoid impacts on Crotch’s bumble bee, the following measures will be implemented:</p> <ul style="list-style-type: none"> <li>▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat during the flight season (March through September), and herbicide application will not target native flowering plants while blooming. Herbicide application will be conducted with ground-level application only (i.e., paint-on stems, backpack hand-applicator, hypo-hatchet tree injection, or hand placement of pellets). No aerial spray of herbicides will occur.</li> <li>▶ Prescribed burning and biomass disposal will be designed to avoid overwintering bumble bees and bumble bee floral resources:             <ul style="list-style-type: none"> <li>▪ Chips will not be placed on or within 5 feet of habitat that is likely suitable for a bumble bee nest (e.g., existing burrows, cavities).</li> <li>▪ Burn piles that remain on site for greater than one year will be surveyed for bumble bee nests prior to burning by a CDFW-reviewed bumble bee biologist, or they will be burned during the season when bumble bees are inactive (October through February).</li> </ul> </li> </ul>			



Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ Broadcast burning in habitat suitable for sensitive bumble bees will be restricted to October 31 – February 28 to protect emergent bumble bee floral resources.</li> <li>▶ CDFW will receive resumes describing the qualifications of bumble bee biologists conducting targeted bumble bee surveys.</li> <li>▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year. The scale will be determined by a qualified biologist or RPF. The objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area.</li> </ul>			
<p><b>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>▶ Reference the <i>Manual of California Vegetation</i>, Appendix 2, Table A2, <i>Fire Characteristics</i> (Sawyer et al. 2009 or current version, including updated natural communities’ data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>) 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 Wagendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.</li> <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>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► 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).</p> <p>► 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 Wagtenonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>).</p> <p>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).</p> <p>A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.</p>			

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.</p>			
<p><b>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>▪ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by:</li> <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> <p>► The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p> <ol style="list-style-type: none"> <li>1. 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</li> </ol>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>(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.</p> <p>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 or enhanced habitat.</p> <p>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.</p>			
<p><b>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</b></p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> <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> <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> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <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, 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:                             <ul style="list-style-type: none"> <li>▪ No special-status species are present in the wetland habitat</li> <li>▪ The wetland habitat function will 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 the wetland buffer</li> </ul> </li> </ul>			
<p><b>Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>▶ <b>Retain Known Nursery Sites.</b> 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>▶ <b>Establish Avoidance Buffers.</b> 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 biologist, based on potential effects of project-related habitat 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.</li> </ul>	<p>Prior to and during treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Greenhouse Gas Emissions</b>			
<p><b>Mitigation Measure GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns</b></p> <p>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 <i>National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire</i> (NWCG 2018):</p> <ul style="list-style-type: none"> <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, and biomass utilization; and</li> <li>▶ schedule burns before new fuels appear.</li> </ul> <p>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.</p> <p>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.</p>	<p>Prior to and during prescribed burning treatment</p>	<p>California State Parks</p>	<p>California State Parks</p>

Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Hazardous Materials, Public Health and Safety</b>			
<p><b>Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites</b></p> <p>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 (<a href="https://www.envirostor.dtsc.ca.gov/public/">https://www.envirostor.dtsc.ca.gov/public/</a>) 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.</p>	<p>During PSA preparation</p> <p><b>Database searches are complete; see PSA/Addendum for results</b></p>	<p>California State Parks</p>	<p>California State Parks</p>

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