

# **Attachment A**

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Standard Project Requirements &  
Mitigation Measures

## Attachment A – Standard Project Requirements (SPR) & Mitigation Measures (MM)

### EC-1: Aesthetic and Visual Resource

- ▶ **SPR AES-1 Vegetation Thinning and Edge Feathering:** 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.
- ▶ **SPR AES-2 Avoid Staging within Viewsheds:** The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR AES-3 Provide Vegetation Screening:** 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.

### EC-2: Agriculture and Forest Resources

- ▶ NONE

### EC-3: Air Quality

- ▶ **SPR AQ-1 Comply with Air Quality Regulations:** The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR AQ-2 Submit Smoke Management Plan:** 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.
- ▶ **SPR AQ-3 Create Burn Plan:** The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. 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.

- ▶ **SPR AQ-4 Minimize Dust:** To minimize dust during treatment activities, the project proponent will implement the following measures:
  - Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol.
  - If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations.
  - Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113.
  - Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR AQ-5 Avoid Naturally Occurring Asbestos:** 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.
- ▶ **SPR AQ-6 Prescribed Burn Safety Procedures:** Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). 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.
- ▶ **MM AQ-1 Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques:**

Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. 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.

Techniques for reducing emissions may include, but are not limited to, the following:

- Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment.
  - Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria:
    - meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer;
    - be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables;
    - contain no fatty acids or functionalized fatty acid esters; and
    - have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines.
- ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment.
- ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes.
- ▶ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NOX and PM.

## EC-4: Archaeological, Historical, and Tribal Cultural Resources

Cultural resource SPRs and mitigation measures require that qualified individuals implement components of the measures. The requirements listed below will be met to be considered qualified and may be performed by individuals of various titles (including supervised designees) as long as they are qualified.

**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.

**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 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.

- ▶ **SPR CUL-1 Conduct Record Search:** An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a

landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR CUL-2 Contact Geographically Affiliated Native American Tribes:** The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following:
  - A written description of the treatment location and boundaries.
  - Brief narrative of the treatment objectives.
  - A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.
  - A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.
  - A request for information regarding potential impacts to cultural resources from the proposed treatment.
  - A detailed description of the depth of excavation, if ground disturbance is expected.

In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR CUL-3 Pre-field Research:** The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR CUL-4 Archaeological Surveys:** The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR CUL-5 Treatment of Archaeological Resources:** If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey

report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR CUL-6 Treatment of Tribal Cultural Resources:** 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.
- ▶ **SPR CUL-7 Avoid Built Historical Resources:** If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR CUL-8 Cultural Resource Training:** The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **MM CUL-2 Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources:** If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified 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.

## EC-5: Biological Resources

Biological resource SPRs and mitigation measures require that qualified individuals implement components of the measures. The 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, biological technician, or supervised designees working at the direction of a qualified professional) as long as they are qualified for the task at hand.

**Qualified Registered Professional Forester (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.

**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.

- ▶ **SPR BIO-1 Review and Survey Project-Specific Biological Resources:** The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA for each treatment project, 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 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 Biological Resources Discussion in the

PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:

1. **Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.** If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:
  - a. by physically avoiding the suitable habitat, or
  - b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).

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.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

## Project-Specific Implementation

### *Special-Status Plants*

- ▶ It is not feasible for treatment activities other than manual tree planting to avoid the sensitive season or suitable habitat of special status plants; therefore, implementation of SPR BIO-7 would be required before the start of all other treatment activities.

### *Special-Status Wildlife*

- ▶ It is not feasible for treatment activities other than manual tree planting to avoid the sensitive season or suitable habitat of California red-legged frog, southern long-toed salamander, western pond turtle, Crotch bumble bee, and western bumble bee; therefore, implementation of SPR BIO-10 would be required before start of all other treatment activities.
- ▶ To avoid impacts to Sierra Nevada yellow-legged frog, if the 100-foot no-disturbance buffer from aquatic habitat for the species is determined to be infeasible, focused visual encounter surveys will be conducted for the species prior to treatment activities, except for manual tree planting, or presence will be assumed within 100 feet of aquatic habitat.
  - Surveys will be conducted at least three times within 10 years prior to treatment activities, except for manual tree planting. Three surveys may be conducted within a single summer with early season (14 days after snow melt), mid-season, and late season (before cold temperatures trigger movement to winter habitats). Alternatively, the three surveys may be conducted in consecutive calendar years, where the snowpack is at least 80 percent of normal (USFWS 2017). Visual encounter surveys will be conducted within 100 feet of aquatic features potentially suitable for Sierra Nevada yellow-legged frogs within the project area and will include all life stages of the species. If Sierra Nevada yellow-legged frogs of any life stage are identified during focused surveys, USFWS and CDFW will be

notified. If three surveys with negative findings of Sierra Nevada yellow-legged frogs have been conducted within the last 10 years, prior to treatment activities, no further measures are required. If Sierra Nevada yellow-legged frogs are detected during surveys, or if presence is assumed, Mitigation Measure BIO-2a will be implemented.

- ▶ To avoid impacts on foothill yellow-legged frog, a no-disturbance buffer of 200 feet will be implemented adjacent to all Class I and Class II waters that contain suitable habitat for the species, if feasible during the wet season (November 15 through April 15). During the dry season (April 15 through November 15), the no-disturbance buffer will correspond to the Watercourse and Lake Protection Zones (WLPZs) pursuant to SPR HYD-4. If the 200-foot or WLPZ no-disturbance buffer is determined to be infeasible for any treatment activity, except for manual tree planting, then SPR BIO-10 will be implemented.
- ▶ To avoid impacts to California spotted owl, a qualified RPF or biologist would review California spotted owl occurrence data in the CNDDDB and the project proponent will contact US Forest Service to obtain any recent survey and occurrence data that have not been made publicly available. Potential impacts on California spotted owl would be avoided by implementing a limited operating period within 0.25 mile of nesting habitat within the project area or any documented occurrence during the spotted owl nesting season (March 1–August 15) for treatment activities that include the use of heavy equipment, multiple vehicles, or loud hand tools (e.g., chain saws, or prescribed burning. If the limited operating period is determined to be infeasible, then SPR BIO-10 would apply.
- ▶ To avoid impacts to bald eagle, black swift, golden eagle, and northern goshawk, treatment activities (i.e., prescribed burning, mechanical treatments, manual treatments, except for manual tree planting, and herbicide application) conducted within nesting habitat for these species, as determined by a qualified RPF or biologist, would be conducted outside the nesting bird season (February 1–August 31). If it is not feasible to conduct treatments outside of the nesting bird season, then SPR BIO-10 would apply.
- ▶ To avoid impacts on monarch butterfly, treatments (i.e., broadcast burning, mechanical treatments, manual tree removal, and herbicide application) will be conducted in suitable habitat for hostplants of the species outside of the season when monarch eggs, larvae, and pupae are likely to be present (i.e., treatment will be conducted outside of June 1 through September 30) (CDFW 2019). This period may be adjusted by a qualified biologist or RPF to reflect local timing of monarch breeding. If it is not feasible to avoid treatments during this sensitive season, then SPR BIO-10 will be implemented.
- ▶ To avoid impacts to fisher, broadcast burning, manual tree removal, and mechanical treatments would occur outside of the fisher maternity season (March 1–June 30). If conducting broadcast burning, manual treatments using chainsaws, and mechanical treatments outside of the fisher maternity season is determined to be infeasible, then SPR BIO-10 would apply.
- ▶ To avoid impacts to ringtail, prescribed burning, manual treatments using chainsaws, and mechanical treatments in habitat suitable for ringtail would occur outside of the ringtail maternity season (April 15–June 30). If conducting prescribed burning, manual treatments using chainsaws, or mechanical treatments within habitat suitable for ringtail outside of the ringtail maternity season is determined to be infeasible, then SPR BIO-10 would apply.

To avoid impacts to special-status bats (i.e., pallid bat, Townsend’s big-eared bat, western mastiff bat, western red bat), prescribed burning, mechanical treatments, and manual tree removal occur outside of the bat maternity season (April 1–August 31). If it is not feasible to avoid treatments during this sensitive season, then SPR BIO-10 would apply.

- ▶ **SPR BIO-2 Require Biological Resource Training for Workers:** The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively

implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered 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.

- ▶ **SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.** If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:
  - require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of *A Manual of California Vegetation* (including updated natural communities data at <http://vegetation.cnps.org/>), or referring to relevant reports (e.g., reports found on the VegCAMP website).
  - map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.** Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:
  - 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.
  - 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.
  - 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.

- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see *Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service*).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. 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.
- 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.
- The project proponent will notify CDFW pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.
- In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR BIO-5 Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub:** The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics

may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).

During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area.

For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:

- Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.
- 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.

These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.

Additional measures will be applied to ecological restoration treatment types:

- For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.
- 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 would be improved.
- A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology.

- 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.

These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.

A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.

- ▶ **SPR BIO-6 Prevent Spread of Plant Pathogens:** When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of *Phytophthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle):
  - clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk;
  - include training on *Phytophthora* diseases and other plant pathogens in the worker awareness training;
  - minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment;
  - minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;
  - clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and
  - follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for *Phytopheras* in Native Habitats 2016).

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR BIO-7: Survey for Special-Status Plants.** If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities."

Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status.

If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.

For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:

- If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.
- If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.

This SPR applies to all treatment activities, and treatment types, including treatment maintenance.

- ▶ **SPR BIO-9 Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife:** The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):
  - clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;
  - for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
  - inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;
  - stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;
  - identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;

- treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and
- implement Fire and Fuel Management BMPs outlined in the “Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers” (Cal-IPC 2012, or current version).

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.** If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.

The qualified RPF or biologist will determine if following an established protocol is required, and the project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol surveys for a special-status species with potential to occur in the treatment area may not be required if presence of the species is assumed.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

### Project-Specific Implementation

- ▶ Pursuant to SPR BIO-1, avoidance of California red-legged frog is infeasible for all treatments other than manual tree planting. Therefore, protocol-level surveys for California red-legged frog will be conducted by a qualified RPF or biologist pursuant to the *Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog* (USFWS 2005) in keeping with the methods in *The Declining Amphibian Task Force Fieldwork Code of Practice* (USFWS 2024) within aquatic habitat potentially suitable for the species, or presence of the species may be assumed.
  - If California red-legged frogs are not detected within the treatment area during protocol-level surveys, then no mitigation for the species will be required and the buffers will not be required.
  - If presence is assumed or California red-legged frogs are identified during focused surveys, then Mitigation Measure BIO-2a will apply.
- ▶ If the 200-foot no-disturbance buffer for foothill yellow-legged frog during the wet season (November 15 through April 15) or WLPZ no-disturbance buffer during the dry season (April 15 through November 15) pursuant to SPR BIO-1 is determined to be infeasible for all activities other than manual tree planting, to avoid impacts on the species, focused visual encounter surveys for foothill yellow-legged frog will be conducted during the breeding season for the species as determined by a qualified biologist or RPF. Surveys will be conducted by a qualified biologist or RPF in keeping with *The Declining Amphibian Task Force Fieldwork Code of Practice* (USFWS 2024) prior to treatment activities within suitable habitat prior to treatment or presence of the species may be assumed. If foothill yellow-legged frogs are not detected within the project area during focused surveys, then no mitigation for the species will be required. If foothill yellow-legged frogs are identified during focused surveys, or presence is assumed, Mitigation Measure BIO-2a will be implemented.

- ▶ If the 100-foot no-disturbance buffer for Sierra Nevada yellow-legged frog is determined to be infeasible, to avoid impacts on the species, a habitat survey and three visual encounter surveys in 10 years of all life stages of Sierra Nevada yellow-legged frog will be conducted by a qualified biologist or RPF in keeping with *The Declining Amphibian Task Force Fieldwork Code of Practice* (USFWS 2024) prior to treatment activities, except for manual tree planting, within suitable habitat or presence may be assumed. If Sierra Nevada yellow-legged frogs are not detected within the project area during focused surveys, then no mitigation for the species will be required. If foothill yellow-legged frogs are identified during focused surveys, Mitigation Measure BIO-2a will be implemented.
- ▶ Because no-disturbance buffers for southern long-toed salamanders are not feasible, to avoid impacts on southern long-toed salamanders, focused surveys (i.e., walk and turn surveys) will be conducted in habitat suitable (i.e., up to approximately 330 feet from aquatic habitat) for the species prior to implementing treatment activities, except for manual tree planting, within suitable habitat, or presence may be assumed. If southern long-toed salamanders are not detected within the treatment area during focused surveys, then no mitigation for the species will be required. If the species is detected during focused surveys or presence is assumed, then Mitigation Measure BIO-2b will be implemented.
- ▶ Because it is not feasible to avoid treatments within 1,500 feet of aquatic habitat suitable for western pond turtle, pursuant to SPR BIO-1, to avoid impacts on western pond turtle, focused visual encounter surveys for individuals and nests will be conducted by a qualified RPF or biologist prior to treatment activities, except for manual tree planting, that occur in habitat suitable for nesting by western pond turtle. If western pond turtles or nests are not detected within the treatment area during focused surveys, then no mitigation for the species will be required. If western pond turtles or nests are detected during focused surveys, Mitigation Measure BIO-2b will be implemented.
- ▶ If it is not feasible to avoid impacts on California spotted owl by avoiding treatment activities that include the use of heavy equipment, multiple vehicles, or loud hand tools (e.g., chainsaws) during the sensitive nesting season (March 1–August 15), then protocol-level surveys for California spotted owl will be conducted by a qualified RPF or biologist within a 0.25-mile buffer surrounding the treatment area in habitat suitable for the species prior to implementation of treatment activities. If nesting California spotted owls are not identified during protocol-level surveys, then further mitigation for the species will not be required. If nesting California spotted owls are detected during protocol surveys, Mitigation Measure BIO-2b will be implemented.
- ▶ If it is not feasible to avoid broadcast burning, mechanical treatments, manual treatments other than tree planting, and herbicide application during the nesting bird season (February 1– August 31) within nesting habitat, pursuant to SPR BIO-1, then focused surveys (i.e., nest searches) for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season. If nesting special-status birds are detected during focused surveys, Mitigation Measure BIO-2a (bald eagle, golden eagle) or BIO-2b (northern goshawk, black swift) will be implemented depending on the species detected.
- ▶ If it is not feasible to avoid broadcast burning, mechanical treatments, manual tree removal, and herbicide application during the sensitive season for monarch butterflies (June 1–September 30) pursuant to SPR BIO-1, a focused survey will be conducted for monarch butterfly hostplants and noninvasive visual surveys for butterflies. If monarch butterflies or their hostplants are not identified during focused surveys, then further mitigation for the species will not be required. If the presence of monarch butterflies is assumed or the species is detected during focused surveys, Mitigation Measure BIO-2e will be implemented.
- ▶ Pursuant to SPR BIO-1, it is not feasible to conduct treatments outside of the sensitive season for Crotch bumble bee and western bumble bee. Therefore, a habitat assessment and focused surveys for Crotch

- ▶ bumble bee and western bumble bee would be conducted following the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023) prior to implementation of treatment activities, except for manual tree planting, or presence of the species within treatment areas would be assumed. If special-status bumble bees are detected during surveys or presence is assumed Mitigation Measure BIO-2g would apply.
- ▶ If the limited operating period for fisher is determined to be infeasible, to avoid impacts on the species, focused surveys for fisher, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing manual tree removal, mechanical treatments, broadcast burning, and pile burning during the fisher maternity season (May 1–June 30) within habitat suitable for the species. If fishers are not detected during focused surveys, then further mitigation for the species will not be required. If presence of fisher is assumed or the species is detected during focused surveys by a qualified RPF or biologist, Mitigation Measure BIO-2b will be implemented.
- ▶ 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 these species will be conducted by a qualified RPF or biologist within suitable habitat areas prior to initiation of mechanical, manual tree removal, and prescribed burning treatments during the bat maternity season (April 1–August 31). If special-status bats are not detected during focused surveys, then further mitigation for the species will not be required. If special-status bat roosts are identified during focused surveys, Mitigation Measure BIO-2b for special-status bats will be implemented.
- ▶ 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 manual tree removal, mechanical treatments, prescribed burning during the ringtail maternity season (April 15–June 30) within habitats suitable for the species. If an active ringtail den is not detected during focused surveys, then further mitigation for the species will not be required. If presence of ringtail is assumed or an active den is identified during focused surveys by a qualified RPF or biologist, Mitigation Measure BIO-2a will be implemented.
- ▶ **SPR BIO-12 Protect Common Nesting Birds, Including Raptors:** The project proponent will schedule treatment activities, to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the 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 season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other

biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).

If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following measures:

- **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.
- **Modify Treatment.** The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.
- **Defer Treatment.** The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.

Feasible actions will be taken by the project proponent to avoid loss of common native bird nests. The feasibility of implementing the avoidance strategies will be determined by the project proponent based on whether implementation of this SPR will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. Considerations may include limitations on the presence of environmental and atmospheric conditions necessary to execute treatment prescriptions (e.g., the limited seasonal windows during which prescribed burning can occur when vegetation moisture, weather, wind, and other physical conditions are suitable). If it is infeasible to avoid loss of common bird nests (not including raptor nests), the project proponent will document the reasons implementation of the avoidance strategies is infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests:

- **Monitor Active Raptor Nest During Treatment.** A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases.

- **Retention of Raptor Nest Trees.** Trees with visible raptor nests, whether occupied or not, will be retained.

This SPR applies to all treatment activities, and treatment types, including treatment maintenance.

Project specific implementation

Due to the nature of manual tree planting proposed for the project, this activity would not substantially disturb the nests of common nesting birds or raptors and nest surveys and buffers are not applicable to that activity.

- ▶ **MM BIO-1a Avoid Loss of Special-Status Plants Listed under ESA or CESA:** If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.

For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.

- ▶ **MM BIO-1b Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA:** If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-

status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:

- Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.
- Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank.
- Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.
- No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.

A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.

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.

- ▶ **MM BIO-2a Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities):** If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following.

#### **Avoid Mortality, Injury, or Disturbance of Individuals**

- ▶ The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:
  1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR
  2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species.
    - For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c.
    - Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.

#### **Maintain Habitat Function**

The project proponent will design treatment activities to maintain the habitat function, by implementing the following:

- While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.
- If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.

A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.

## Project-Specific Implementation

### *California red-legged frog*

- ▶ Pre-treatment visual surveys will be performed daily by a qualified RPF, biologist, or biological technician prior to implementation of any treatment activities (i.e., prescribed burning, mechanical treatments, manual tree and shrub removal, and herbicide application) within 300 feet of Class I or Class II streams and within or adjacent to other potential habitat areas (e.g., wet intermittent streams, wet seeps) during the dispersal season (October 1–April 15) or within 24 hours following a rain event greater than one quarter inch. Surveys and monitoring will be performed year-round prior to any activities within 30 feet of Class I or Class II streams and within or adjacent to other potential habitat areas (e.g., wet Class III streams, wet seeps).
- ▶ If an individual is found during pre-treatment surveys or enters the project site during treatment activities, all work will stop until the animal leaves on its own and the occurrence will be reported to the qualified biologist, and USFWS.
- ▶ 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 these species by a qualified biologist, qualified professional, RPF, RPF supervised designee, or a contractor who has attended the environmental awareness training.
- ▶ No mechanized operations year around (including track chippers unless on an existing road) in a Watercourse and Lake Protection Zone of a Class I or Class II watercourse or within 30 feet of a Class III or adjacent to other potential sensitive habitat areas (e.g., wet seeps).
- ▶ All mechanized equipment including track chippers will shut down for 24 hours following any precipitation event of 0.20 inch to less than 1 inch, 48 hours following any precipitation event 1 inch to less than 2 inches, and 72 hours following any precipitation event greater or equal to 2 inches. Handwork may continue.
- ▶ No heavy equipment shall be fueled within 65 feet of any watercourse.
- ▶ 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.
  - Cut stump and basal bark applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat.

### *Foothill yellow-legged frog*

- ▶ Treatment activities within 200 feet of aquatic habitat during the wet season (November 15 through April 15) or within the WLPZ during the dry season (April 15 through November 15) that is occupied or assumed to be occupied by foothill yellow-legged frog (pursuant to SPR BIO-10) will be limited to manual treatments and broadcast burning.

- ▶ Daily inspection of the day's treatment area within 200 feet of occupied or assumed occupied aquatic habitat during the wet season (November 15 through April 15), or within the WLPZ of occupied or assumed to be occupied habitat during the dry season (April 15 through November 15), will be performed by a qualified biologist, RPF, or biological technician for all activities other than manual tree planting. The biologist, RPF, or biological technician will monitor all activities within 100 feet of aquatic habitat.
- ▶ If foothill yellow-legged frogs are encountered within the project area, all project activities which have the potential to result in harassment, injury, or death will stop within 100 feet of the frog. If foothill yellow-legged frogs are encountered, CDFW and USFWS will be notified. Frogs will be allowed to leave the construction area of their own volition.
  - Cut stump and basal bark herbicide applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat.
  - No heavy equipment shall be fueled within 65 feet of any watercourse.

#### *Sierra Nevada yellow-legged frog*

- ▶ Treatment activities within 100 feet of aquatic habitat that is occupied or assumed to be occupied by Sierra Nevada yellow-legged frog (pursuant to SPR BIO-10) will be limited to manual treatments, broadcast burning, and herbicide application.
- ▶ Daily inspection of the day's treatment area for all activities other than manual tree planting within 100 feet of aquatic habitat occupied or assumed to be occupied by Sierra Nevada yellow-legged frog will be performed by a qualified biologist, RPF, or biological technician. The biologist, RPF, or biological technician will monitor all activities within 100 feet of aquatic habitat.
- ▶ If Sierra Nevada yellow-legged frogs are encountered within the project area, all project activities which have the potential to result in harassment, injury, or death will stop within 100 feet of the frog. If Sierra Nevada yellow-legged frogs are encountered, CDFW and USFWS will be notified. Frogs will be allowed to leave the construction area of their own volition.
  - Cut stump and basal bark herbicide applications may be used but will not be applied within 60 feet of breeding or non-breeding aquatic habitat.
  - No heavy equipment shall be fueled within 65 feet of any watercourse.

#### *Special-status birds*

- ▶ If the limited operating period for nesting birds is determined to be infeasible (pursuant to SPR BIO-1) and a bald eagle or golden eagle nest is detected during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of at least 0.5 mile will be established around the nest, and no treatment activities other than manual tree planting will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW. Additionally, the final determination for habitat function maintenance for bald eagle and golden eagle must be made by Siller in consultation with CDFW. Therefore, if Mitigation Measure BIO-2a is required for treatment activities, Siller will contact CDFW to seek technical input on the determination that habitat function will be maintained for bald eagle and golden eagle.

#### *Ringtail*

- ▶ If the limited operating period for ringtail (pursuant to SPR BIO-1) is determined to be infeasible and presence of ringtails is detected during focused surveys or assumed (pursuant to SPR BIO-10), then the following avoidance and minimization measures will be required:

- **Den Surveys.** Within seven days prior to the start of prescribed burning, manual tree removal, and mechanical treatments during the ringtail maternity season, a qualified RPF or biologist will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biologist will search for large trees (i.e., greater than 12 inches 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 biologist will inspect the cavity using a cell phone with a flash, or other tools (e.g., borescopes) to determine whether ringtails are present. Areas (e.g., large trees) with appropriate den habitat, occupied or not, will be marked (i.e., with flagging, spray paint), for inspection during future sweeps (as described below). The qualified RPF or biologist will also search for dens in dense shrub habitat and will note any sightings of fleeing adult ringtails.
- **Active Dens.** 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, prescribed burning, manual tree removal, and mechanical treatments, will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer 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 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.
- **Daily Sweeps, Training, and Monitoring.** If active ringtail dens are not discovered, the following measures will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search as well as take of adult ringtails and kits.
- **Daily Sweeps.** On the first morning of work for prescribed burning, manual tree removal, and mechanical treatments, a qualified RPF or biologist will conduct a sweep of the area to be treated that and will search all habitat suitable for ringtails where mastication will occur that day (i.e., larger trees, dense shrub, rock piles) for active dens or adults, including the trees with cavities previously marked by the qualified RPF or biologist. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens (see training requirements below under "Training and Monitoring"). If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and the requirements described above under "Active Dens" will be followed.
- **Training and Monitoring.** On the first morning of work for prescribed burning, manual tree removal, and mechanical treatments, the qualified RPF or biologist will provide biological resource training (as required under CalVTP Program EIR SPR BIO-2) for all contractors. In addition to standard biological resource training, the qualified RPF or biologist will provide additional training specific to ringtail that will include the following elements:

  - Description of ringtail appearance (i.e., physical features, typical size);
  - Description of typical ringtail behavior;
  - 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;
  - Measures required during operation, including daily sweeps of habitat suitable for ringtail where mastication will occur that day (i.e., dense shrub habitat, previously marked tree cavities), year-round take avoidance measures, and required increased vigilance when operating in dense shrub habitat;

- Measures required if a ringtail is spotted (i.e., all work halts until a qualified RPF or biologist can conduct a den search and sweep; if the qualified RPF or biologist observes a ringtail or confirms the contractor's observation, the occurrence will be reported to CDFW at R2Timber@wildlife.ca.gov);
- 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);
- Definition of and legal consequences for take of ringtail (i.e., fine for each take and/or time in jail); and
- Requirements for contacting CDFW, which 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).

Additionally, if Mitigation Measure BIO-2a is required for treatment activities, Siller will contact CDFW to seek technical input on the determination that habitat function will be maintained for ringtail and input on their proposed measures to avoid injury to or mortality of this species.

- ▶ **MM BIO-2b Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities):** If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following.

**Avoid Mortality, Injury, or Disturbance of Individuals**

The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:

For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site-and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

- No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in

disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician may will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment if the treatment activity has the potential to result in mortality, injury, or disturbance. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.

- For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.

### **Maintain Habitat Function**

For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following:

- While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.
- If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained.
- A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function.

A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of

occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.

The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment.

## Project-Specific Implementation

### *Southern long-toed salamander*

- ▶ If a southern long-toed salamander is detected within treatment areas during focused surveys (pursuant to SPR BIO-10), biological monitoring of the treatment area will occur during treatment activities other than manual tree planting. If southern long-toed salamanders are found during monitoring, work will cease within 50 feet of the animal until it has moved out of the treatment area or until it can be relocated by a qualified RPF or biologist with a valid CDFW scientific collecting permit.

### *Western pond turtle*

- ▶ If a western pond turtle nest is detected within treatment areas during focused surveys (pursuant to SPR BIO-10), a buffer of 50 feet from the nest will be flagged for avoidance. The location will be monitored during treatment activities other than manual tree planting, and if individual western pond turtles are found outside of the buffer, work will cease until the animal leaves the treatment area on its own or the animal is relocated outside of the treatment area by a qualified RPF or biologist with a valid CDFW scientific collecting permit. Other measures recommended by a qualified RPF or biologist as necessary to avoid injury or mortality of western pond turtles would be implemented.

### *California Spotted owl*

- ▶ If the limited operating period for California spotted owl is determined to be infeasible (pursuant to SPR BIO-1) and a California spotted owl nest is detected during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of at least 0.25 mile will be established around the nest, and no treatment activities other than manual tree planting will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.

### *Special-status birds*

- ▶ If active northern goshawk or black swift nests are detected within treatment areas during focused surveys (pursuant to SPR BIO-10), a no-disturbance buffer of 0.25 mile (northern goshawk) or 100 feet (black swift) will be established around the nest, and no treatment activities other than manual tree planting will occur within this buffer until chicks have fledged as determined by a qualified RPF or biologist. This buffer may be adjusted by a qualified RPF or biologist based on treatment activities, topographic and vegetation screening, baseline disturbance, and other factors.

### *Fisher*

- ▶ If an active fisher den is detected during focused surveys, or presence is assumed pursuant to SPR BIO\_10, additional focused surveys for dens will be required, prior to broadcast burning, manual tree removal, and mechanical treatments. If a den is detected during focal den surveys, a no-disturbance buffer will be established around the den, the size of which will be determined through consultation with CDFW. No broadcast burning, manual treatments using power tools, and mechanical treatments will occur within this buffer between March 1–June 30 or until the den is no longer occupied as determined by the qualified RPF or biologist.

### *Special-status bats*

- ▶ If the bat maternity roosting season cannot be avoided (pursuant to SPR BIO-1) and a special-status bat roost is detected during focused surveys (pursuant to BIO-10), a no-disturbance buffer of 250 feet will be established around the roost, and no mechanical treatments, manual tree removal, and prescribed burning will occur within this buffer until the roost is no longer being used as determined by a qualified RPF or biologist.
- ▶ **MM BIO-2e Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities):** 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:
  - Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34).
  - 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.
  - Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type will not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore.
  - 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.
  - 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.

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.

**CESA and ESA Listed Species.** 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, or 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.

**Other Special-status Species.** 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.

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), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.

**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

## Project-Specific Implementation

- ▶ If host plants for monarch butterflies are detected, and monarch eggs, larvae, and pupae are detected during focus surveys pursuant to SPR BIO-10 or assumed to be present, host plants will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities other than manual tree planting will occur within 10 feet of these plants if feasible (unless, pursuant to SPR BIO-1, activities occur outside of the period June 1 through September 30, when impacts to eggs, larvae, and pupae can be avoided)

If monarch butterflies are detected during focused surveys pursuant to SPR BIO-10, or presence is assumed, treatments will be conducted in a patchy pattern to the extent feasible in grasslands and oak woodlands, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat and floral resources are retained.

- ▶ **MM BIO-2g Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities):** 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:
  - 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.
    - 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.
  - 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).
  - 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).

**CESA and ESA Listed Species.** 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.

**Other Special-status Species.** 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 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.

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.

### Project-Specific Implementation

If Crotch bumble bee or western bumble bee are detected during surveys conducted pursuant to SPR BIO-10, or the species is assumed to be present, to avoid impacts on Crotch bumble bee and western bumble bee, the following measures will be implemented:

- ▶ Biomass disposal will be designed to avoid nesting bumble bees and bumble bee floral resources.
  - Chips will not be placed on or within 5 feet of habitat that is likely suitable for bumble bee nests (e.g., existing rodent burrows, cavities).
  - Burn piles that remain on site for greater than 1 year will be surveyed for bumble bee nests prior to burning by a qualified biologist, or they will be burned during the season when bumble bees are inactive (October through February).
- ▶ Prescribed burning in habitat suitable for sensitive bumble bees will be restricted to the winter season prior to emergence of bumble bee floral resources. Generally, prescribed burning will be limited to October 31 – February 28. If conditions in a given year vary and the timing of floral resource emergence is altered by unusual conditions (e.g., heavy rains, extended cold season), the prescribed burning window may be altered with coordination from a qualified bumble bee biologist. Variation from the October 31 - February 28 broadcast burning window will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). Treatment areas for other than manual tree planting 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.
- ▶ **MM BIO-3a Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands:** The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:
  - Reference the *Manual of California Vegetation*, Appendix 2, Table A2, *Fire Characteristics* (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>) or other best available information to determine the natural fire regime

of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.

- 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 *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>). Fuel reduction 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.
- To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).
- To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).
- Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in *Fire in California's Ecosystems* (Van Wagtendonk et al. 2018) and the *Manual of California Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at <http://vegetation.cnps.org/>).
- Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory.

The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).

- ▶ A qualified 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.

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.

- ▶ **MM BIO-4 Avoid State and Federally Protected Wetlands:** Impacts to wetlands will be avoided using the following measures:
  - 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.
  - 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).
  - 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.
  - 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.
  - Within this buffer, herbicide application is prohibited.
  - Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging.

- Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:
  - No special-status species are present in the wetland habitat
  - The wetland habitat function would be maintained.
  - The prescribed burn is within the normal fire return interval for the wetland vegetation types present
  - Fire containment lines and pile burning are prohibited within the buffer.
  - No fire ignition (and associated use of accelerants) will occur within the wetland buffer.
- ▶ **MM BIO-5 Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites:** 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:
  - Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment.
  - Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or 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.

## EC-6: Geology, Soils, and Mineral Resource

- ▶ **SPR GEO-1 Suspend Disturbance during Heavy Precipitation:** The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR GEO-2 Limit High Ground Pressure Vehicles:** The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already

compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR GEO-3 Stabilize Disturbed Soil Areas:** The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR GEO-4 Erosion Monitoring:** The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e.,  $\geq 1.5$  inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR GEO-5 Drain Stormwater via Water Breaks:** The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR GEO-6 Minimize Burn Pile Size:** The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. 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.
- ▶ **SPR GEO-7 Minimize Erosion:** To minimize erosion, the project proponent will:
  - (1) Prohibit use of heavy equipment where any of the following conditions are present:
    - i. Slopes steeper than 65 percent.
    - ii. Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.
    - iii. Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.

(2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to:

- i. Existing tractor roads that do not require reconstruction, or
- ii. New tractor roads flagged by the project proponent prior to the treatment activity.

(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope.

This SPR applies to all treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR GEO-8 Steep Slopes:** The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, or 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 would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.

## EC-7: Greenhouse Gas Emissions

- ▶ **MM GHG-2 Implement GHG Emission Reduction Techniques During Prescribed Burns:** When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the *National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire* (NWCG 2018):
  - reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;
  - reduce the total area burned through mosaic burning;
  - burn when fuels have a higher fuel moisture content;
  - reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and
  - schedule burns before new fuels appear.

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.

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.

## EC-8: Energy

- ▶ NONE

## EC-9: Hazardous Material and Public Health and Safety

- ▶ **SPR HAZ-1 Maintain All Equipment:** The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR HAZ-2 Require Spark Arrestors:** The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR HAZ-3 Require Fire Extinguishers:** The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR HAZ-4 Prohibit Smoking in Vegetated Areas:** The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR HAZ-5 Spill Prevention and Response Plan:** The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to):
  - a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;
  - a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;
  - procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.

This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR HAZ-6 Comply with Herbicide Application Regulations:** The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following:
  - Be implemented consistent with recommendations prepared annually by a licensed PCA.
  - Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions.
  - Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation.
  - Be applied by an applicator appropriately licensed by the State.

This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR HAZ-7 Triple Rinse Herbicide Containers:** The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations.

This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR HAZ-8 Minimize Herbicide Drift to Public Areas:** The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas:
  - application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative);
  - spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift;
  - low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and
  - spray nozzles will be kept within 24 inches of vegetation during spraying.

This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas:** For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.
- ▶ **MM HAZ-3 Identify and Avoid Known Hazardous Waste Sites:** Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (<https://www.envirostor.dtsc.ca.gov/public/>) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after

review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.

## EC-10: Hydrology and Water Quality

- ▶ **SPR HYD-1 Comply with Water Quality Regulations:** Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (WDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, WDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR HYD-2 Avoid Construction of New Roads:** The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:** The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

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

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

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

< 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)

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced, a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).
- Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.
- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.
- WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.
- Burn piles will be located outside of WLPZs.
- No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.
- 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 15<sup>th</sup> and disturbances that are created after October 15<sup>th</sup> shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.

Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.

Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.

- Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-

slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.

This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:** The project proponent will implement the following measures when applying herbicides:
  - Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway.
  - Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.
  - No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA.
  - No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools.
  - For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray.
    - Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative).
    - No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.

This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR HYD-6 Protect Existing Drainage Systems:** If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and ensure that restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

## EC-11: Land Use and Planning, Population and Housing

- ▶ NONE

## EC-12: Noise

- ▶ **SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:** The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to

receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR NOI-2 Equipment Maintenance:** The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.
- ▶ **SPR NOI-3 Engine Shroud Closure:** The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses:** The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (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.
- ▶ **SPR NOI-5 Restrict Equipment Idle Time:** The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:** For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.

## EC-13: Recreation

- ▶ NONE

## EC-14: Transportation

- ▶ **SPR TRAN-1 Implement Traffic Control during Treatments:** Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards

along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.

## EC-15: Public Services and Utilities

- ▶ NONE

## EC-16: Wildfire

- ▶ NONE

## EC-17: Administrative

- ▶ **SPR AD-1 Project Proponent Coordination:** For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR AD-2 Delineate Protected Resources:** The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.
- ▶ **SPR AD-3 Consistency with Local Plans, Policies, and Ordinances:** The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the

project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.

- ▶ **SPR AD-4 Public Notifications for Prescribed Burning:** 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 newspaper 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.
- ▶ **SPR AD-5 Maintain Site Cleanliness:** If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.
- ▶ **SPR AD-6 Public Notifications for Treatment Projects.** 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.
- ▶ **SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects.** For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism.

Information on proposed projects (PSA in progress):

- GIS data that include project location (as a point);
- project size (typically acres);
- treatment types and activities; and
- contact information for a representative of the project proponent.

Information on approved projects (PSA complete):

- A completed PSA Environmental Checklist;
- A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);
- 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)

Information on completed projects:

- 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)
- A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes
  - Size of treated area (typically acres);
  - Treatment types and activities;
  - Dates of work;
  - A list of the SPRs and mitigation measures that were implemented
  - 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).

This SPR applies to all treatment activities and all treatment types, including treatment maintenance.

- ▶ **SPR AD-8 Request Access for Post-Treatment Assessment.** For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.

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