Attachment A

Mitigation Monitoring and Reporting Program for the Grouse Ridge Vegetation Treatment Project

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

The California Environmental Quality Act (CEQA) and the State CEQA Guidelines (PRC Section 21081.6 and State CEQA Guidelines Sections 15091[d] and 15097) require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval to mitigate or avoid significant effects on the environment." A Mitigation Monitoring and Reporting Program (MMRP) is required for approval of the proposed project, because the PSA/Addendum identifies potential significant adverse impacts and all feasible mitigation measures have been adopted. Standard project requirements (SPRs), which are part of the program description, have been defined to avoid or minimize adverse effects. Where potentially significant impacts remain after application of SPRs, mitigation measures have been identified to further reduce and/or compensate for those impacts. While only mitigation measures are required to be covered in an MMRP, both SPRs and mitigation are included in the MMRP to assist in implementation of all environmental protection features of later activities consistent with the CalVTP.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to monitor the implementation of SPRs and mitigation measures. The attached table presents the text of each SPR and mitigation measure, the timing of its planned implementation, the implementing entity, and the entity with monitoring responsibility. The numbering of SPRs and mitigation measures follows the numbering used in the PEIR. SPRs and mitigation measures that are referenced more than once in the PSA/Addendum are not duplicated in the MMRP.

ROLES AND RESPONSIBILITIES

Unless otherwise specified herein, the project proponent (Berkeley Forests) is responsible for taking all actions necessary to implement the mitigation measures under its jurisdiction according to the specifications provided for each measure and for demonstrating that the action has been successfully completed, pursuant to Section 15097 of the State CEQA Guidelines.

The project proponent is responsible for overall administration of the project-specific MMRP and for verifying that staff members or contractors have completed the necessary actions for each measure (i.e., appropriate amendments to the proposed ordinance). For this project, the CEQA lead agency is the University of California (UC Regents) and will be responsible for verifying that SPRs and mitigation measures are implemented by project partners on their property.

REPORTING

The project proponent will document and describe the compliance of the proposed project with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report.

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

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

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

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Administrative Standard Project Requirements			
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.	Prior to treatment	Berkeley Forests	Berkeley Forests
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.	Prior to treatment	Berkeley Forests	Berkeley Forests
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 newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	At least three days prior to prescribed burn activities	Berkeley Forests	Berkeley Forests
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.	During treatment	Berkeley Forests	Berkeley Forests
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.	One to three days prior to the prescribed burn activities	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website). Information on approved projects (PSA complete): ▶ 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.	Prior to, during, and following treatment	Berkeley Forests/PSA Preparers	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Aesthetic and Visual Resource Standard Project Requirements			
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.	During mechanical and manual treatment activities	Berkeley Forests	Berkeley Forests
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.	During treatment	Berkeley Forests	Berkeley Forests
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.	During treatment	Berkeley Forests	Berkeley Forests
Air Quality Standard Project Requirements			
SPR AQ-1: Comply with Air Quality Regulations. The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During treatment	Berkeley Forests	Berkeley Forests
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.	Prior to prescribed burn treatment activities	Berkeley Forests	Berkeley Forests
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.	Prior to prescribed burn treatment activities	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Project-Specific Implementation ▶ The National Wildfire Coordinating Group burn plan template will be used for all prescribed burns consistent with UC Regents standard practice. This template will be equally effective at reducing potential impacts related to prescribed burning. ▶ A technical specialist qualified to perform fire behavior modeling will conduct the modeling for the project consistent with UC Regents standard practice.			
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.	During treatment	Berkeley Forests	Berkeley Forests
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.	During prescribed burn treatment activities	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Project-Specific Implementation ▶ Crews implementing prescribed burns will follow UC Regents standard safety and training requirements. These safety requirements will be equally effective at reducing potential safety impacts related to prescribed burns. ▶ The required IAP contents will be incorporated into the burn plan prepared under SPR AQ-3, which will be approved by the applicable burn boss for each prescribed burn.			
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements			
SPR CUL-1: Conduct Record Search. An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Completed	Berkeley Forests/PSA Preparers	Berkeley Forests
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.	Completed	Berkeley Forests	Berkeley Forests
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.	Completed	Berkeley Forests	Berkeley Forests
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,	Prior to treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.			
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area and determined to be significant by an archaeologically-trained resource professional and/or qualified archaeologist the site will be flagged and avoided. This SPR applies to all treatment activities and treatment types.	Prior to and during treatment	Berkeley Forests	Berkeley Forests
SPR CUL-6 Treatment of Tribal Cultural Resources: If tribal cultural resources are identified within a treatment area and determined to be significant by the culturally affiliated tribe(s), the site will be temporarily flagged. Any flagging will be removed after treatment to maintain the confidentiality of the site location. Measures to avoid impacts to an identified tribal cultural resource during treatment may include the following: ▶ Dense vegetation within the site boundaries will be hand-cleared. ▶ Duff will be removed from bedrock mortars and other modified features. ▶ The culturally affiliated tribe will be invited to inspect the resource after vegetation clearing to reassess the site boundary and will be invited to be present when treatment activities are occurring within an identified tribal cultural resource. ▶ Heavy equipment will not be used within the site boundary, as delineated by the protective flagging or marking. ▶ Trees within or near the boundaries of the site may be felled directionally out of the sites, so long as their removal will not affect contributing elements to the site, such as artifacts, features or cultural soils. When tree removal occurs within the boundaries of sites, then the stumps should not be removed, but may be ground down. This minimizes the potential to impact subsurface cultural resources.	Prior to and during treatment	Berkeley Forests	Berkeley Forests
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) 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.	Prior to treatment	Berkeley Forests	Berkeley Forests
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 or tribal 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.	Prior to and during treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Biological Resources Standard Project Requirements			
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:	Completed	Berkeley Forests	Berkeley Forests
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.	Prior to and during treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Project-Specific Implementation ▶ To avoid impacts on northern goshawk in parcels within 0.25 mile of a documented nest location, a limited operating period for mechanical treatments, manual treatments, herbicide application, and prescribed burning from February 15 to September 15 will be implemented within these parcels, if feasible. ▶ To avoid impacts on ringtail in parcels within 0.6 mile of permanent aquatic habitat, a limited operating period for mechanical treatments and prescribed burning from March 1 to July 31 will be implemented within these parcels, if feasible. ▶ To avoid impacts on Sierra Nevada snowshoe hare, a limited operating period for mechanical treatments and prescribed burning will be implemented during the maternity season (June 1–July 31) in areas that contain habitat suitable for the species (i.e., brush stands, thickets of young conifers, riparian areas), if feasible. 2. **Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided**. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7). This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered 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.	Prior to and during treatment	Berkeley Forests	Berkeley Forests; CDFW and USFWS, as appropriate

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

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see *Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service*). ▶ 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-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 *Phytopthora* and other plant pathogens (e.g., pitch canker (*Fusarium*), goldspotted oak borer, shot hole borer, bark beetle): ▶ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ▶ include training on *Phytopthora* diseases and other plant pathogens in the worker awareness training; ▶ 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;	Prior to and during treatment	Berkeley Forests	Berkeley Forests

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

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Invasive Plants and Wildlife			
SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail): ▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; ▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; ▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys 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.	Prior to and during treatment	Berkeley Forests	Berkeley Forests
Wildlife			
SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be	No more than 14 days prior to treatment	Berkeley Forests	Berkeley Forests; CDFW, and/or USFWS, as necessary

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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** ▶ To avoid impacts on special-status birds (i.e., bald eagle, golden eagle, olive-sided flycatcher, yellow warbler), focused surveys (i.e., nest searches) for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season (February 1–August 31). ▶ To avoid impacts on special-status bats (i.e., pallid bat, spotted bat, Townsend's big-eared bat), focused surveys for maternity roosts of these species will be conducted prior to implementing treatment activities during the bat maternity season (April 1–August 31). ▶ If the limited operating period for ringtail is determined to be infeasible, focused surveys for ringtail, including non-invasive survey methods (e.g., trail cameras, track plates, hair snares), will be conducted prior to implementing mechanical treatments and prescribed burning within 0.6 mile of permanent aquatic habitat during the ringtail maternity season (April 15–July 31). If the limited operating period for Sierra Nevada snowshoe hare is determined to be infeasible, focused surveys for the Sierra Nevada snowshoe hare will be conducted within habitat suitable for the species ((i.e., brush stands, thickets of young conifers, riparian areas) prior to implementation of mechanical treatments and prescribed burning within these habitats during the maternity season (June 1–July 31). Surveys for Sierra Nevada snowshoe hare will include walking transects to determine whether hares are actively nesting within the treatment area.			
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., CNDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identity the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey	Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies (typically, up to 3 weeks before treatment); if an active nest is observed,	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food). If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following: ▶ **Establish Buffer.** The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. ▶ **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:	implement avoidance strategies prior to and during treatment		

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ **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.			
Geology, Soils, and Mineral Resource Standard Project Requirements			
SPR GEO-1: Suspend Disturbance during Heavy Precipitation. The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.	During treatment if there is a "chance" (30 percent or more) of rain within the next 24 hours	Berkeley Forests	Berkeley Forests
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.	During treatment if there is a "chance" (30 percent or more) of rain within the next 24 hours	Berkeley Forests	Berkeley Forests
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	During mechanical and prescribed burn activities that result in exposure of bare soil over 50 percent or more of the treatment area	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.			
SPR GEO-4: Erosion Monitoring. The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season; if erosion control measures are not properly implemented, remediate prior to the first rainfall event; inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 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	Berkeley Forests	Berkeley Forests
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.	During mechanical, manual, and prescribed burn treatment activities	Berkeley Forests	Berkeley Forests
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	During mechanical, manual, and	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	prescribed burn treatment activities		
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.	During treatment	Berkeley Forests	Berkeley Forests
SPR GEO-8: Steep Slopes. The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Prior to and during treatment on slopes greater than 50 percent	Berkeley Forests	Berkeley Forests
Hazardous Materials, Public Health and Safety Standard Project Requirements			
SPR HAZ-1: Maintain All Equipment. The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Inspect all equipment for leaks prior to treatment; inspect everyday thereafter until equipment is removed from the site; promptly remove any leaking equipment; maintain all diesel- and	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
	gasoline-powered equipment per manufacturer's specifications and in compliance with all state and federal emissions requirements during treatment		
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.	During manual treatment activities	Berkeley Forests	Berkeley Forests
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.	During manual treatment activities	Berkeley Forests	Berkeley Forests
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.	During treatment	Berkeley Forests	Berkeley Forests
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.	Prepare SPRP prior to beginning any herbicide treatment activities; implement measures during herbicide treatment activities	Berkeley Forests	Berkeley Forests
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.	Prior to treatment	Berkeley Forests	Berkeley Forests and Nevada County Agricultural Commissioner

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ 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.	During herbicide treatment activities	Berkeley Forests	Berkeley Forests
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.	During herbicide treatment activities	Berkeley Forests	Berkeley Forests
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.	During herbicide treatment activities occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet	Berkeley Forests	Berkeley Forests
Hydrology and Water Quality Standard Project Requirements			
SPR HYD-1: Comply with Water Quality Regulations. Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply.	During treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	Prior to treatment	Berkeley Forests	Berkeley Forests
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. 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.	Establish WLPZs during design of treatment project (complete; see PSA); implement WLPZ protections during treatment	Berkeley Forests	Berkeley Forests

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

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.			
SPR HYD-6: Protect Existing Drainage Systems. If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Mark existing stormwater drainage infrastructure prior to ground disturbing activities; if a drainage structure or infiltration system is inadvertently disturbed or modified during treatment, coordinate with owner to repair damage and restore pre-project drainage conditions	Berkeley Forests	Berkeley Forests
Noise Standard Project Requirements			
SPR NOI-1: Limit Heavy Equipment Use to Daytime Hours. The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	During treatment	Berkeley Forests	Berkeley Forests
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	During treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.	During treatment	Berkeley Forests	Berkeley Forests
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.	During treatment	Berkeley Forests	Berkeley Forests
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.	During treatment	Berkeley Forests	Berkeley Forests
Recreation Standard Project Requirements			
SPR REC-1 Notify Recreational Users of Temporary Closures. If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Approximately 2 weeks prior to treatment projects requiring temporary closure of public recreation areas or facilities	Berkeley Forests	Berkeley Forests
Transportation Standard Project Requirements			
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	Prepare TMP prior to treatment and implement during treatments	Berkeley Forests	Berkeley Forests and agency(ies) with jurisdiction over affected roadways

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

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. If a tribal cultural resource is identified, the culturally affiliated tribe will be consulted regarding their preferred method of treatment for the feature. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.			
Biological Resources			
Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat: ▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and 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 (nor use of associated 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	Prior to and during treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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. **Project-Specific Implementation.** ▶ If special-status plant species are detected during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which mechanical treatment, manual treatment, herbicide application, and prescribed burning will not occur.			
Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities) If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals: 1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR 2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species.	Prior to and during treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c. ▶ Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided. <u>Maintain Habitat Function</u> The project proponent will design treatment activities to maintain the habitat function, by implementing the following: ▶ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. ▶ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained. ▶ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because 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.** ▶ If a bald eagle or golden eagle nest is detected during focused surveys, a no-disturbance buffer of at least 500 feet will be established around the nest, and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. ▶ If ringtails are detected during focused surveys, then additional surveys would be required to determine whether an active ringtail den is present within the treatment area. If an active den is identified by a qualified RPF or biologist. A no disturbance buffer will be established around the den, the size of which will be determined through consultation with CDFW.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities) If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following. <u>Avoid Mortality, Injury, or Disturbance of Individuals</u> 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 will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. ▶ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that	Prior to and during treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment. **Project-Specific Implementation:** ▶ If an olive-sided flycatcher or yellow warbler nest is detected during focused surveys, a no-disturbance buffer of at least 100 feet will be established around the nest, and no treatment activities will occur within this buffer until the chicks have fledged as determined by a qualified RPF or biologist. ▶ If a pallid bat, spotted bat, or Townsend's big-eared bat roost is detected during focused surveys, a no-disturbance buffer of 250 feet will be established around the roost, and no treatment activities will occur within this buffer until the roost is no longer being used as determined by a qualified RPF or biologist. ▶ If an active Sierra Nevada snowshoe hare nest is detected during focused surveys, a no-disturbance buffer of sufficient size to prevent disturbance will be established around the nest, and no treatment activities will occur within this buffer until the young have left the nest as determined by a qualified RPF or biologist.			
Mitigation Measure 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/). 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	Prior to and during treatment	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
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.			

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions: ▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: ▪ restoring sensitive natural community or oak woodland functions and acreage within the treatment area; ▪ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or ▪ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.	Prior to treatment projects	Berkeley Forests	Berkeley Forests; CDFW, and/or any other applicable responsible agency
Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following: ▶ Compensate for unavoidable losses of riparian habitat acreage and function by: ▪ restoring riparian habitat functions and acreage within the treatment area; ▪ restoring degraded riparian habitat outside of the treatment area; ▪ purchasing riparian habitat credits at a CDFW-approved mitigation bank; or ▪ preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value.	Prior to treatment projects	Berkeley Forests	Berkeley Forests/CDFW

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: 1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity. 2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.			
Mitigation Measure 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.	Prior to and during treatment projects	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
▶ 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 **Project-Specific Implementation:** Prior to implementation of treatment activities, a qualified RPF or biologist will delineate the boundaries of seasonal wetland habitat associated with alder thickets in the treatment area, and will establish a no-disturbance buffer of at least 25 feet with flagging or fencing.			
Greenhouse Gas Emissions			
Mitigation Measure 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.	Prior to and during prescribed burn activities	Berkeley Forests	Berkeley Forests

Standard Project Requirements	Timing	Implementing Entity	Verifying/Monitoring Entity
The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.			
Hazardous Materials, Public Health and Safety			
Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.	Completed	Berkeley Forests/PSA Preparers	Berkeley Forests

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Attachment B

Biological Resources

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

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Scalloped moonwort *Botrychium crenulatum*	–	–	2B.2	Moist meadows, freshwater marsh, and near creeks. 3,888–10,203 feet in elevation. Blooms June–September.	Not expected to occur. The treatment area does not contain meadow or marsh habitat.
Mingan moonwort *Botrychium minganense*	–	–	2B.2	Creekbanks in mixed conifer forest. 3,904–10,810 feet in elevation. Blooms July–September.	May occur. Habitat potentially suitable for this species is present along streams in the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Watershield *Brasenia schreberi*	–	–	2B.3	Aquatic from water bodies both natural and artificial in California. 98–7,218 feet in elevation. Blooms June–September.	Not expected to occur. The treatment area does not contain aquatic habitat suitable for this species.
Van Zuuk's morning-glory *Calystegia vanzuukiae*	–	–	1B.3	Chaparral, cismontane woodland. Gabbro, serpentinite. 1,640–3,871 feet in elevation. Blooms May–August.	Not expected to occur. The treatment areas do not contain gabbro or serpentine soils.
Davy's sedge *Carex davyi*	–	–	1B.3	Subalpine coniferous forest, upper montane coniferous forest. 4,790–10,597 feet in elevation. Blooms May–August.	May occur. Habitat potentially suitable for this species is present in forested portions of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Woolly-fruited sedge *Carex lasiocarpa*	–	–	2B.3	Sphagnum bogs, freshwater marsh, lake margins. 1,969–6,398 feet in elevation. Blooms June–July.	Not expected to occur. The treatment area does not contain sphagnum bog, marsh, or lake habitat.
Mud sedge *Carex limosa*	–	–	2B.2	In floating bogs, soggy meadows, and edges of lakes. 4,495–9,154 feet in elevation. Blooms June–August.	Not expected to occur. The treatment area does not contain bog, meadow, or lake habitat.
Sheldon's sedge *Carex sheldonii*	–	–	2B.2	Mesic sites; along creeks and in wet meadows. 3,937–6,611 feet in elevation. Blooms May–August.	May occur. Habitat potentially suitable for this species is present along streams and in seasonal wetland habitat in the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Northern coralroot *Corallorhiza trifida*	–	–	2B.1	Wet, open to shaded, generally coniferous forest. In California, under firs, in partial shade. 3,986–5,709 feet in elevation. Blooms June–July.	May occur. Habitat potentially suitable for this species is present in mesic forested portions of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Starved daisy *Erigeron miser*	–	–	1B.3	Upper montane coniferous forest. Rocky, granitic outcrops. 5,085–9,104 feet in elevation. Blooms June–October.	May occur. Habitat potentially suitable for this species is present in forested portions of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Donner Pass buckwheat *Eriogonum umbellatum* var. *torreyanum*	–	–	1B.2	Steep slopes and ridgetops; rocky, volcanic soils; usually in bare or sparsely vegetated areas. 6,086–8,596 feet in elevation. Blooms July–September.	May occur. Habitat potentially suitable for this species is present in rocky areas of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Cantelow's lewisia *Lewisia cantelovii*	–	–	1B.2	Mesic rock outcrops and wet cliffs, usually in moss or clubmoss; on granitics or sometimes on serpentine. 1,083–4,495 feet in elevation. Blooms May–October.	May occur. Habitat potentially suitable for this species is present in rocky areas of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Saw-toothed lewisia *Lewisia serrata*	–	–	1B.1	Shaded, north-facing moss-covered, metamorphic rock cliffs. 2,953–4,708 feet in elevation. Blooms May–June.	May occur. Habitat potentially suitable for this species is present in rocky areas of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Long seta hump moss *Meesia longiseta*	–	–	2B.3	On moist soil along streams and in meadows; often carbonate. 5,741–9,990 feet in elevation.	Not expected to occur. The treatment area does not contain meadow habitat.
Layne's ragwort *Packera layneae*	FT	SR	1B.2	Ultramafic soil (serpentine or gabbro); occasionally along streams. 656–3,560 feet in elevation. Blooms April–August.	Not expected to occur. The treatment areas do not contain gabbro or serpentine soils
Closed-throated beardtongue *Penstemon personatus*	–	–	1B.2	Lower montane coniferous forest, upper montane coniferous forest, chaparral. Usually on north-facing slopes in metavolcanic soils. 3,494–6,955 feet in elevation. Blooms June–September.	May occur. Habitat potentially suitable for this species is present in forested or brushy portions of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Stebbins' phacelia *Phacelia stebbinsii*	–	–	1B.2	Among rocks and rubble on metamorphic rock benches. 2,001–6,594 feet in elevation. Blooms May–July.	May occur. Habitat potentially suitable for this species is present in rocky areas of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence[2]
Sierra blue grass *Poa sierrae*	–	–	1B.3	Shady, moist, rocky slopes. Often in canyons. 1,198–4,921 feet in elevation. Blooms April–July.	May occur. Habitat potentially suitable for this species is present in rocky areas of the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
Nuttall's ribbon-leaved pondweed *Potamogeton epihydrus*	–	–	2B.2	Shallow water, ponds, lakes, streams, irrigation ditches. 968–8,661 feet in elevation. Blooms July–September.	Not expected to occur. The treatment area does not contain aquatic habitat suitable for this species.
White-stemmed pondweed *Potamogeton praelongus*	–	–	2B.3	Marshes and swamps. Deep water, lakes. 5,906–9,843 feet in elevation. Blooms July–August.	Not expected to occur. The treatment area does not contain aquatic habitat suitable for this species.
Alder buckthorn *Rhamnus alnifolia*	–	–	2B.2	Mesic sites. 4,692–7,005 feet in elevation. Blooms May–July.	May occur. Habitat potentially suitable for this species is present along streams and in seasonal wetland habitat in the treatment area. This species was not observed during rare plant surveys conducted in June 2020 (UC Berkeley 2020).
White beaked-rush *Rhynchospora alba*	–	–	2B.2	Freshwater marshes and sphagnum bogs. 197–6,693 feet in elevation. Blooms June–August.	Not expected to occur. The treatment area does not contain marsh or sphagnum bog habitat.
Water bulrush *Schoenoplectus subterminalis*	–	–	2B.3	Montane lake margins, in shallow water. 2,461–7,382 feet in elevation. Blooms June–August.	Not expected to occur. The treatment area does not contain lake habitat.

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

1 Legal Status Definitions

Federal:

FT Federally Listed as Threatened (legally protected by ESA)

State:

SR State Listed as Rare (legally protected by NPPA)

California Rare Plant Ranks:

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

Threat Ranks:

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

2 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.
May occur: Suitable habitat is available and there have been nearby recorded occurrences of the species.

Sources: CNDDB 2020; CNPS 2020; UC Berkeley 2020

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

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Amphibians and Reptiles				
California red-legged frog *Rana draytonii*	FT	SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not expected to occur. The treatment areas are outside of the known range of this species.
Coast horned lizard *Phrynosoma blainvillii*	–	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not expected to occur. The treatment areas are outside of the known elevation range of this species.
Foothill yellow-legged frog *Rana boylii*	–	ST SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Need at least 15 weeks to attain metamorphosis.	Not expected to occur. Aquatic habitat within the treatment areas (e.g., canal, ephemeral stream, wetland) does not provide habitat suitable for foothill yellow-legged frog. Foothill yellow-legged frogs are known to occur within Fall Creek and Canyon Creek, which are located approximately 300 feet south and 0.4 mile west of the nearest treatment area, respectively (CNDDB 2020). Aquatic habitat potentially suitable for this species is also present within Clear Creek, which is located approximately 300 feet from the nearest treatment area. Treatment activities are not expected to result in adverse effects on foothill yellow-legged frogs within these creeks because they are located a sufficient distance from the creeks and are separated by significant natural barriers (e.g., extremely steep slope between the treatment area and Canyon Creek).
Sierra Nevada yellow-legged frog *Rana sierrae*	FE	ST	Always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development.	Not expected to occur. Aquatic habitat within the treatment areas (e.g., canal, ephemeral stream, wetland) does not provide habitat suitable for Sierra Nevada yellow-legged frog. The nearest known occurrences of Sierra Nevada yellow-legged frog is approximately 1.8 miles north and 3.4 miles west of the treatment area within a basin near Fall Creek Mountain and a tributary to the Yuba River, respectively (CNDDB 2020). Aquatic habitat potentially suitable for this species is also present within Clear Creek, Fall Creek, and Canyon Creek, all of which are outside of the treatment areas and are separated by at least 300 feet. Treatment activities are not expected to result in adverse effects on Sierra Nevada yellow-legged frog, if present within these creeks, because there is sufficient distance from the creeks and the creeks are separated by significant natural barriers (e.g., extremely steep slope between the treatment area and Canyon Creek).

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Southern long-toed salamander *Ambystoma macrodactylum sigillatum*	–	SSC	High elevation meadows and lakes in the Sierra Nevada, Cascade, and Klamath mountains. Aquatic larvae occur in ponds and lakes. Outside of breeding season adults are terrestrial and associated with underground burrows of mammals and moist areas under logs and rocks.	Not expected to occur. There are several documented occurrences of this species in the vicinity of the treatment areas associated with the Yuba River and Bear River (CNDDB 2020). Habitat (e.g., ponds, lakes, streams with pools) for this species is not present within the treatment areas.
Southern mountain yellow-legged frog *Rana muscosa*	FE	SE	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino Mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, April 2014, effective June 30, 2014. Always encountered within a few feet of water. Tadpoles may require 2 - 4 years to complete their aquatic development.	Not expected to occur. The treatment areas are outside of the known range of this species.
Western pond turtle *Actinemys marmorata*	–	SSC	Ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not expected to occur. The treatment areas do not contain aquatic habitat suitable for western pond turtle. Ephemeral streams within the treatment areas do not contain ponds or sandy bank substrate. The human-made canal within the treatment area is primarily lined with cement and a consistent flow that would not provide habitat for this species.
Birds				
Bald eagle *Haliaeetus leucocephalus*	FD	SE FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	May occur. The treatment areas contain some large trees and snags that may provide nesting habitat suitable for bald eagles. This species typically nests near water, and the treatment areas are located within 1 mile of Rucker Lake and Fuller Lake.
California spotted owl *Strix occidentalis occidentalis*	–	SSC	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure greater than 40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within approximately 1,000 feet of water.	Not expected to occur. The treatment areas do not contain nesting habitat with late seral characteristics (e.g., high canopy closure) suitable for California spotted owl. There is one documented California spotted owl nest approximately 0.5 mile away from the nearest treatment area (CNDDB 2020). Treatment activities are not expected to result in adverse effects on this nest, as they are located a sufficient distance from the nest to avoid impacts from auditory or visual disturbance sources (e.g., equipment, personnel).
Golden eagle *Aquila chrysaetos*	–	FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	May occur. The treatment areas contain some large trees and snags that may provide nesting habitat suitable for golden eagles.
Northern goshawk *Accipiter gentilis*	–	SSC	Within, and in vicinity of, coniferous forest. Uses old nests and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	May occur. The treatment area does not contain nesting habitat with late seral characteristics (e.g., high canopy closure) suitable for northern goshawk. However, there are several documented nests and designated Protected Activity Centers within U.S. Forest Service land adjacent to the treatment areas (U.S. Forest Service 2020).

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
Olive-sided flycatcher *Contopus cooperi*	–	SSC	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes, or other open terrain.	May occur. The treatment area contains forest habitat potentially suitable for nesting olive-sided flycatchers. There have been many observations of the species in the vicinity of the treatment area (eBird 2020).
Willow flycatcher *Empidonax traillii*	–	SE	Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters; 2,000-8,000 feet elevation. Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	Not expected to occur. The treatment area does not contain wet meadows or ponds with thickets of dense willows.
Yellow warbler *Setophaga petechia*	–	SSC	Riparian plant associations in proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	May occur. The treatment area contains several alder thickets associated with seasonal wetland habitat, which may provide nesting habitat suitable for yellow warbler. There have been many observations of the species in the vicinity of the treatment area (eBird 2020).
Fish				
Lahontan cutthroat trout *Oncorhynchus clarkii henshawi*	FT	–	Historically in all accessible cold waters of the Lahontan Basin in a wide variety of water temperatures and conditions. Cannot tolerate presence of other salmonids. Requires gravel riffles in streams for spawning.	Not expected to occur. The treatment area is outside of the known range of this species.
Mammals				
California wolverine *Gulo gulo*	FP	ST FP	Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances.	Not expected to occur. While the treatment area is located within the historic range of this species, the only known wolverine in California was last detected in Tahoe National Forest near Truckee. This wolverine has not been detected in the vicinity of the treatment area and the likelihood of the individual occurring within the treatment area is extremely low.
Fisher - West Coast DPS *Pekania pennanti*	FE	SSC	Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Not expected to occur. Fisher is considered to be extirpated from most of the northern and central Sierra Nevada (Zielinski et al. 1995; Sweitzer et al. 2015) and has not been detected within or in the vicinity of the treatment area since the 1980s (CNDDB 2020).
Pallid bat *Antrozous pallidus*	–	SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	May occur. Habitat potentially suitable for pallid bat is present within large trees, snags, or rocky areas within the treatment area.
Ringtail *Bassariscus astutus*	–	FP	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations. Hollow trees, logs, snags, cavities in talus and other rocky areas,	May occur. The project area is within the range of this species and contains habitat potentially suitable for ringtail, including forest, shrub, and riparian habitat.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence[2]
			and other recesses are used for cover. Usually found within 0.6 mile of a permanent water source.	
Sierra Nevada mountain beaver *Aplodontia rufa californica*	–	SSC	Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food and cover. Burrows into soft soil. Needs abundant supply of water.	Not expected to occur. There are two documented occurrences of this species approximately 4 miles north of the treatment area, west of Bowman Lake (CNDDB 2020). Aquatic habitat within the treatment area (e.g., canal, ephemeral stream, wetland) does not have associated dense riparian habitat or bank habitat for burrowing.
Sierra Nevada red fox *Vulpes vulpes necator*	FP	ST	Historically found from the Cascades down to the Sierra Nevada. Found in a variety of habitats from wet meadows to forested areas. Use dense vegetation and rocky areas for cover and den sites. Prefer forests interspersed with meadows or alpine fell-fields.	Not expected to occur. While the treatment area within the historic range of this species, only two small populations of Sierra Nevada red fox are currently known: one near Lassen Peak and one near Sonora Pass. This species is currently unlikely to occur in the treatment area.
Sierra Nevada snowshoe hare *Lepus americanus tahoensis*	–	SSC	Boreal riparian areas in the Sierra Nevada. Thickets of deciduous trees in riparian areas. Dense thickets of young conifers (i.e., early seral stages of conifer forest) and chaparral composed of *Ceanothus* spp. and *Arctostaphylos* spp.	May occur. Riparian habitat within the treatment area consists of alder thickets associated with seasonal wetland habitat. This habitat may provide habitat suitable for Sierra Nevada snowshoe hare. This species may also occur within portions of the treatment areas containing dense thickets of young conifers (i.e., plantations) and brushy areas (e.g., containing *Ceanothus* spp. and *Arctostaphylos* spp.).
Spotted bat *Euderma maculatum*	–	SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	May occur. Habitat potentially suitable for pallid bat is present within rocky areas within the treatment area.
Townsend's big-eared bat *Corynorhinus townsendii*	–	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	May occur. Habitat potentially suitable for Townsend's big-eared bat is present within large trees or human-made structures (e.g., bridges) within the treatment area.

Notes: CNDDB = California Natural Diversity Database; CEQA = California Environmental Quality Act

1 Legal Status Definitions

Federal:

FE Federally Listed as Endangered (legally protected)
FT Federally Listed as Threatened (legally protected)
FD Federally Delisted
FP Proposed for Listing under the federal Endangered Species Act

State:

FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)
SE State Listed as Endangered (legally protected)
ST State Listed as Threatened (legally protected)

2 Potential for Occurrence Definitions

Not expected to occur: Species is unlikely to be present because of poor habitat quality, lack of suitable habitat features, or restricted current distribution of the species.
May occur: Suitable habitat is available; however, there are little to no other indicators that the species might be present.

Sources: CNDDB 2020; eBird 2020

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Grouse Ridge Research Forest

Rare Plant Survey – June 24 and 25, 2020

Amy Mason and Brad Mason

In order to fulfill CEQA requirements, an initial survey was made of the Berkeley Forest known as Grouse Ridge (Map 1 & 2) on June 24 and 25, 2020. An additional survey will be made in the autumn of 2020.

In preparation, searches were made on the CNPS and CNDDB databases:

There are 22 plants listed in the California Native Plant society inventory, 8th edition for the 9 quads including and surrounding Grouse Ridge Research Forest. (Appendix A: Spreadsheet Grouse Ridge Rare Plant Survey 2020: All). Two additional species were listed by CNDDB. We narrowed down the number of species by eliminating 8 species that required marshes as there are none on the forest. We also eliminated the two species that came up in CNDDB as they were actually coastal species. Two additional species require ultramafic soil which is not found in BF Grouse Ridge Research Forest.

There were thus twelve target species (Appendix A: Spreadsheet Grouse Ridge Rare Plant Survey 2020: Target).

Background

Average annual temperatures range for 44-56 degrees F, frost free for between 100-150 days per year. Precipitation ranges from 50-75 inches per year, primarily as snow.

The area contains slopes for 2% to 50%, with elevations for 4600’ to 6200’. The aspect is generally south to southwest facing, with portions facing north and northeast.

There are two Class I streams (section 1, 7), a Class II stream (section 1) and several ephemeral streams throughout. The Nevada Irrigation District’s Bowman-Spaulding Conduit runs through two sections, 1 and 7. There are three wetland areas that are loosely termed “bogs”, but are probably more accurately “fens” in section 5. Two of these areas are substantial enough to support small alder groves. It will be instructive to see how they look in September. Each area is less than an acre in size. (See USFWS wetlands Map 3 & 4)

Soils are largely granitic in origin, with some volcanic and some metasedimentary rock. See appendix B for more details.

Grouse Ridge Research Forest is comprised of 3 sections, NW, S, and NE. See Map 1 & 2.

The NW section, section 1, has 608 acres, of which approximately 300 acres are to be treated. Elevations range from 4640 feet in the farthest south creek drainage to 5600 feet near the top of the ridge. There are two class I creeks, Clear Creek and Fall Creek, and one class II

creek, Trap Creek. The Bowman-Spaulding Conduit, NID, also runs through the eastern edge, but as it is concrete lined, it does not add much to the environment, except as a barrier. Roughly, the western half of the section was burned in 2008 and is characterized by 12-year regeneration of mostly pine, some oak, and dense shrubbery, mostly whitethorn, Ceanothus, and manzanita, Arctostaphus. The eastern half of the section is second growth red fir forest. The Clear Creek, Trap Creek and Fall Creek drainages are steep rocky canyons, not included in the treatment area, and therefore not surveyed at this time. Two surveys were done in this section on June 24, 2020. The first was in the "Forest Health Biomass Thinning" area which is generally open dry second or third growth forest. The second was done in the "Mastication" part of the "Reforestation" area. This attempt was hampered by dense growth of brush. (See Maps: Section 1 Track 1 and 2)

The S section, section 7, has 236 acres, of which approximately 100 acres are to be treated. Elevations range from 5,000 feet in the southwest corner to 5600 feet in the northeast corner. One survey was done in the western half of the section, covering part of the "Canal Fuel Reduction" area and the "Rucker Fuel Break" area. This area was mostly open forest. The canal is concrete-lined but still seems to attract water loving plants like Hosakia oblongifolia. One survey was done on June 24 that visited parts of the "Canal Fuel Reduction" area, the "Road Side Fuel Reduction" area, and the "Rucker Fuel Break" area. (See Map: Section 7 Track)

The NE section, section 5, has 640 acres, of which approximately 450 acres are to be treated. Elevations range from 5600 feet in the southwest corner to 6200 feet in the east. Two surveys were done in the eastern half on June 25. Starting from the Grouse Ridge Lookout Road, first we went north to investigate the "fen" and the alder grove, in one of the "AMEX RX Burn" areas. Then we went south to see the lower alder grove, and looped through a small section of another "AMEX RX Burn" area. (See Map: Section 5 track) Most of this area was very open having been recently harvested (2017-2018), by intensive single tree selection. There were a few dense stands of brush, mostly huckleberry oak, chinquapin, and manzanita. Some areas were quite wet, but probably because the snow just recently melted. This can be confirmed in September.

Results: Of the 24 species listed, eight grow in marshes or ponds, two are found only in north western California, and two species require serpentine soil. We focused on the twelve remaining species, but kept an eye out for the others. None of these were found.

Brasenia schreberi: marches and swamps, occurs in wetlands
Carex lasiocarpa: marshes and swamp
Carex limosa: sphagnum bogs
Schoenoplectus subterminalis: marshes and swamps
Potamogeton praelongus: marshes and swamps
Potamogeton epihydrus: marshes and ponds
Botrychium crenulatum: marshes and bogs/fens

Rhynchospora alba: marshes and bogs/fens

Arabis mcdonaldiana: coastal mountains in NW California, also serpentine soil
Phlox hirsuta: Klammath Mts

Calystegia vanzuukiae: serpentine soil
Packera layneae: serpentine soil

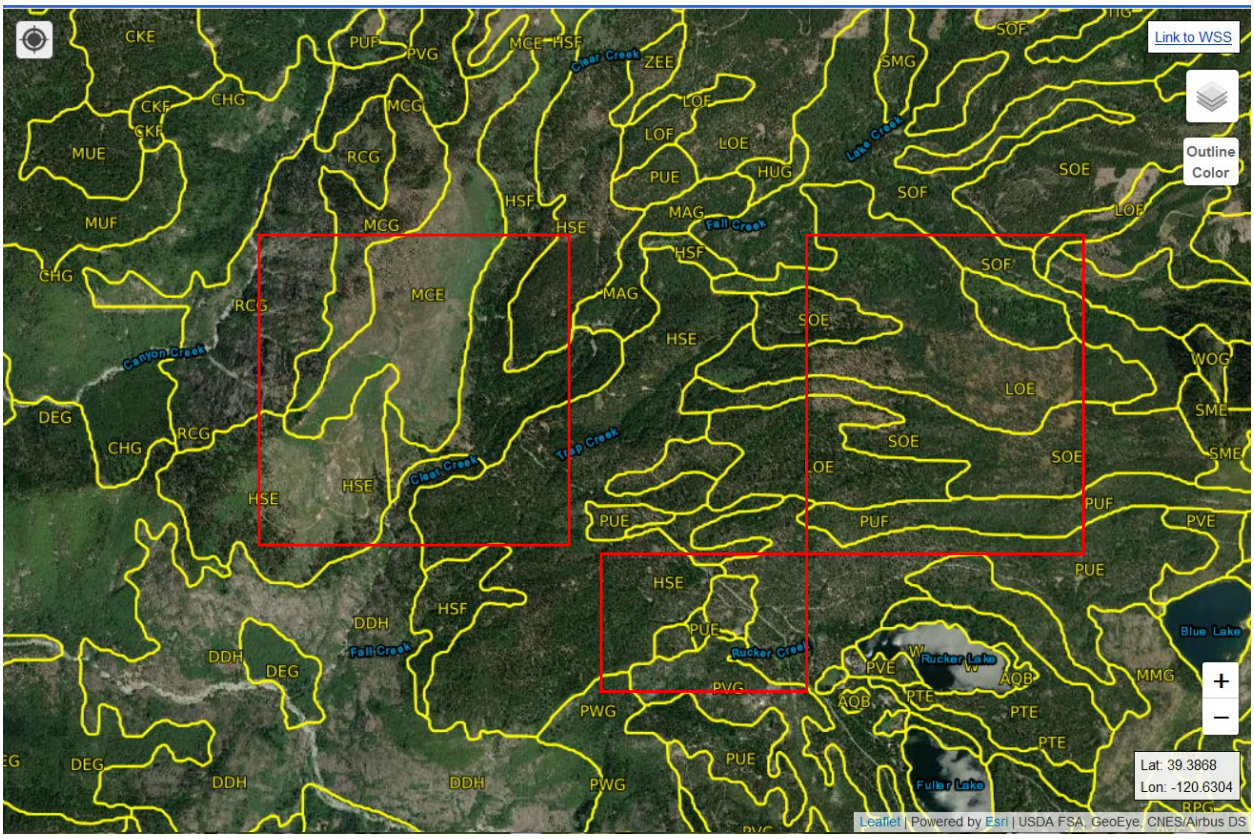
None of the target species were positively identified, either. However, there was difficulty with the Carex species. It will be necessary to prepare better for searching for these species.

Target species:
Poa sierrae - a tiny plant, therefore easy to miss, but with a very distinctive inflorescense, similar to but different other species I have seen
Phacelia stebbinsii – tiny, different form other Phacelia in that it's inflorescence is a spike and not a curl, distinctive leaf shape
Rhamnus alnifolia – Very distinctive leaves: thin enough to transmit light.
Botrychium minganense – very distinctive leaves
Erigeron miser – we found 2 rayless sunflowers but identified them both as different species
Lewisia serrata and Lewisia cantelovii – the Lewisias have very distinctive candy-striped flowers, and we did find a Lewsia, but a different species; these two have easily identifies basal rosettes of leaves
Carex sheldonii – this species has a pretty distinctive flower head, not found
Carex davyi – can't positively identify the Carex that we did find
Eriogonum umbellatum var. torreyanum – Pretty sure we found E. umbellatum, but not torreyanum, which has a whorl of bracts mid-branch in the inflorescense.
Corallorhiza trifida – saw several Coralroot, none blooming yet, but they all had red stems, not green
Penstemon personatus – found an abundance of Penstemon (probably P. roezlii), with very open throats

About 120 species were found and identified, not including all tree & shrub species. See Appendix C.

Appendix A: Soils

Soils from https://casoilresource.lawr.ucdavis.edu/gmap/



Soils: Approximately

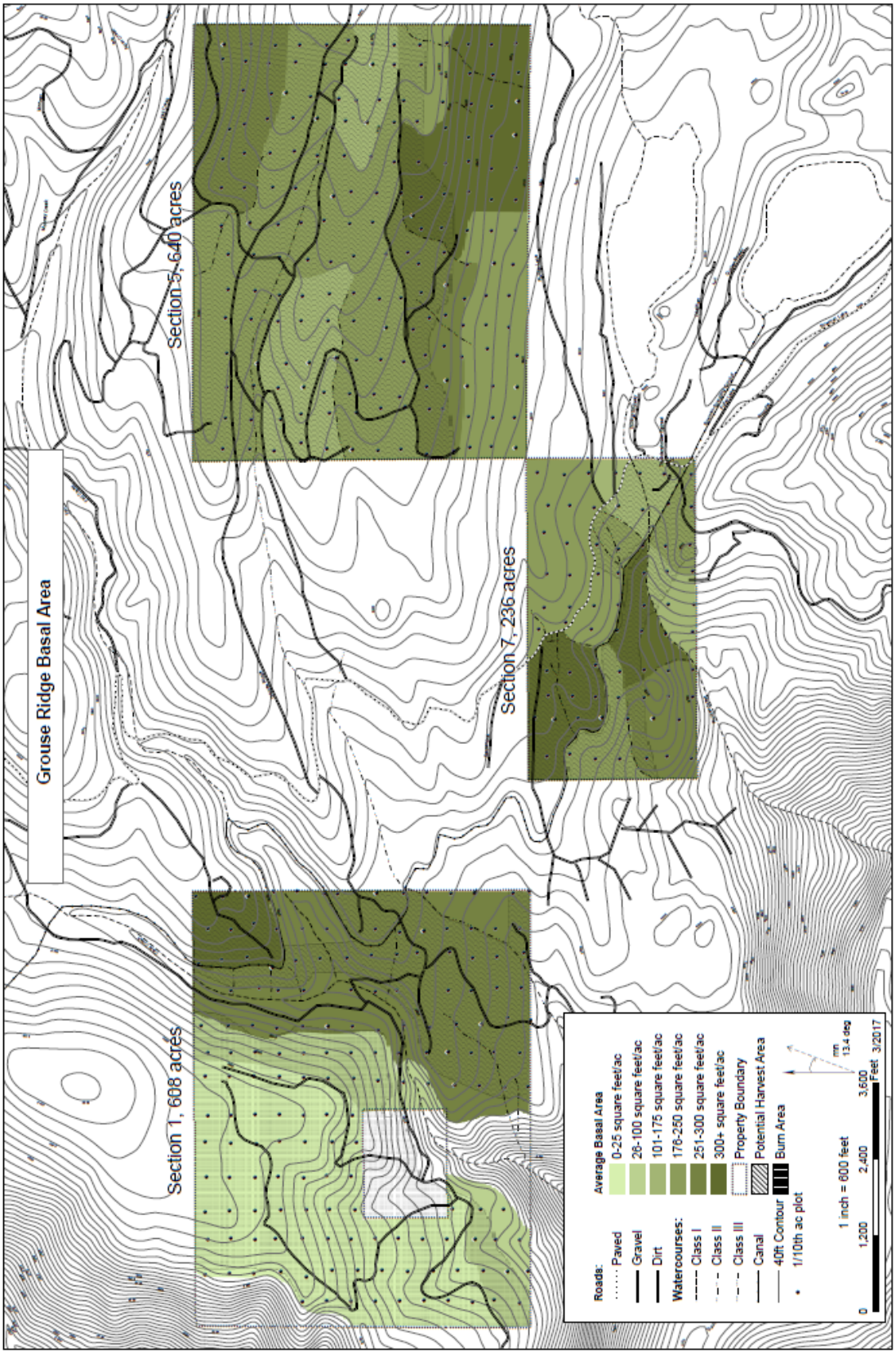
Section 1 - NW	Section 7 - S	Section 5 - NE
10% RCG	35% HSE	40% LOE
6% MCG	25% PUE	10% SOF
25% MCE	20% PVG	20% SOE
15% HSF	15% PVE	12% PUF
40 % HSE	5% PWG	8% PUE
4% DDH		10% LOF

RCG: 55% Rock outcrop, 20% Chawanakee, 15% Chaix, 50-75% slopes
MCG: 50% McCarthy, 20% Ledmount, 20% Crozier, 30-75% slopes
MCE: 50% McCarthy, 20% Ledmount, 20% Crozier, 2-30% slopes
HSF: 60% Huysink, 25% Horseshoe, 30-50% slopes
HSE: 60% Huysink, 25% Horseshoe, 2-30% slopes
DDH: 50% rock outcrop, 35% Deadwood, 50-100% slopes
PUE: 75% Putt, 15 Zeibright, 2-30% slopes
PVG: 45% Putt, 25% rock outcrop, 20% Zeibright, 30-75% slopes

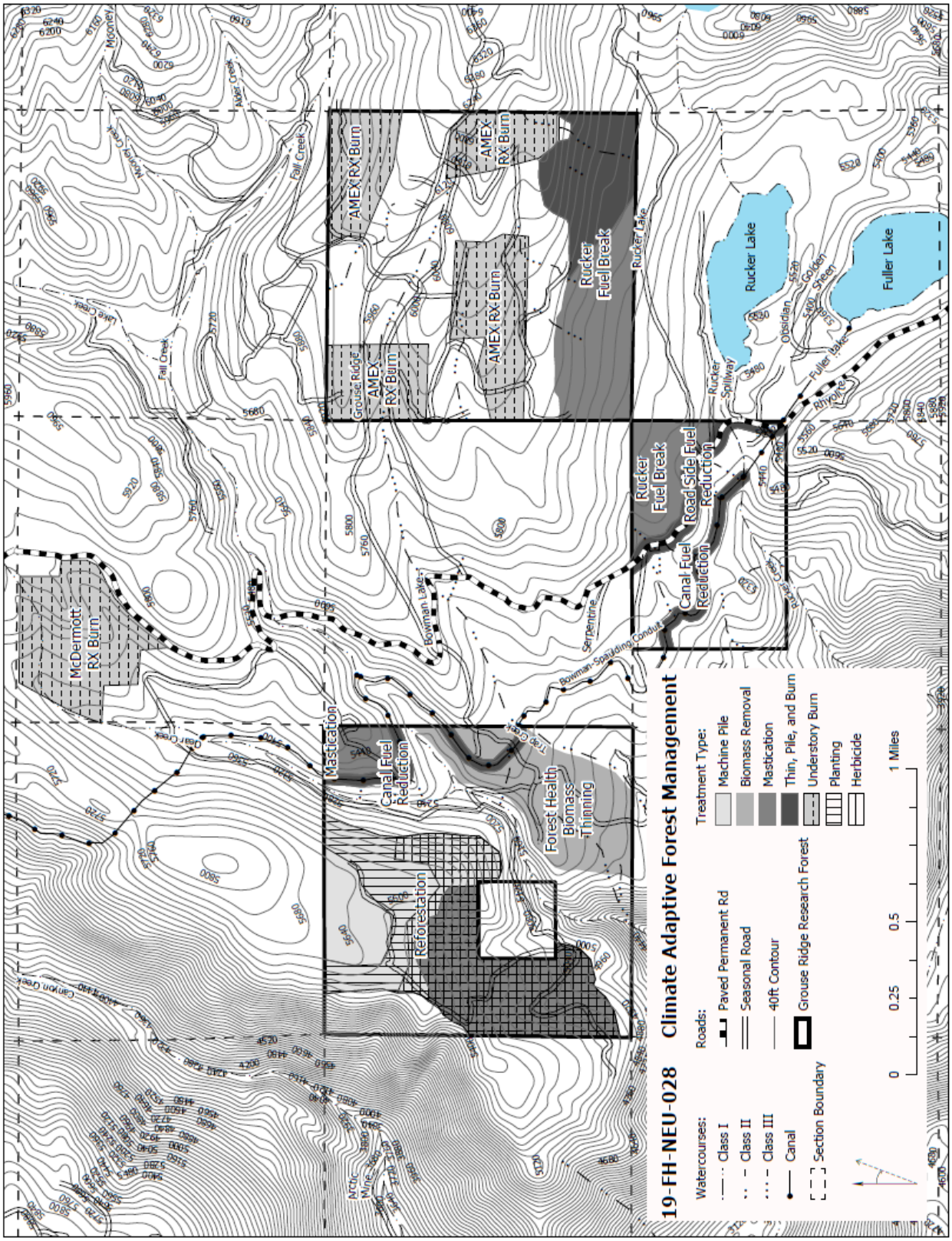
PVE: 45% Putt, 25% rock outcrop, 20% Zeibright, 2-30% slopes
PWG: 45% Putt, 25% rock outcrop, 20 % Zeibright, 30-75% slopes
LOE: 55% Lorack, 20% Smokey, 15% Cryumbrepts, 2-30% slopes
LOF: 55% Lorack, 20% Smokey, 15% Cryumbrepts, 30-50% slopes
SOE: 50 % Smokey, 20% Lorack, 15% Cryumbrepts, 2-30% slopes
SOF: 50 % Smokey, 20% Lorack, 15% Cryumbrepts, 30-50% slopes
PUF: 75% Putt, 15 Zeibright, 30-50% slopes

These soils are largely granitic, with some volcanic and metasedimentary.

Map 1. Inventory plots and acreage

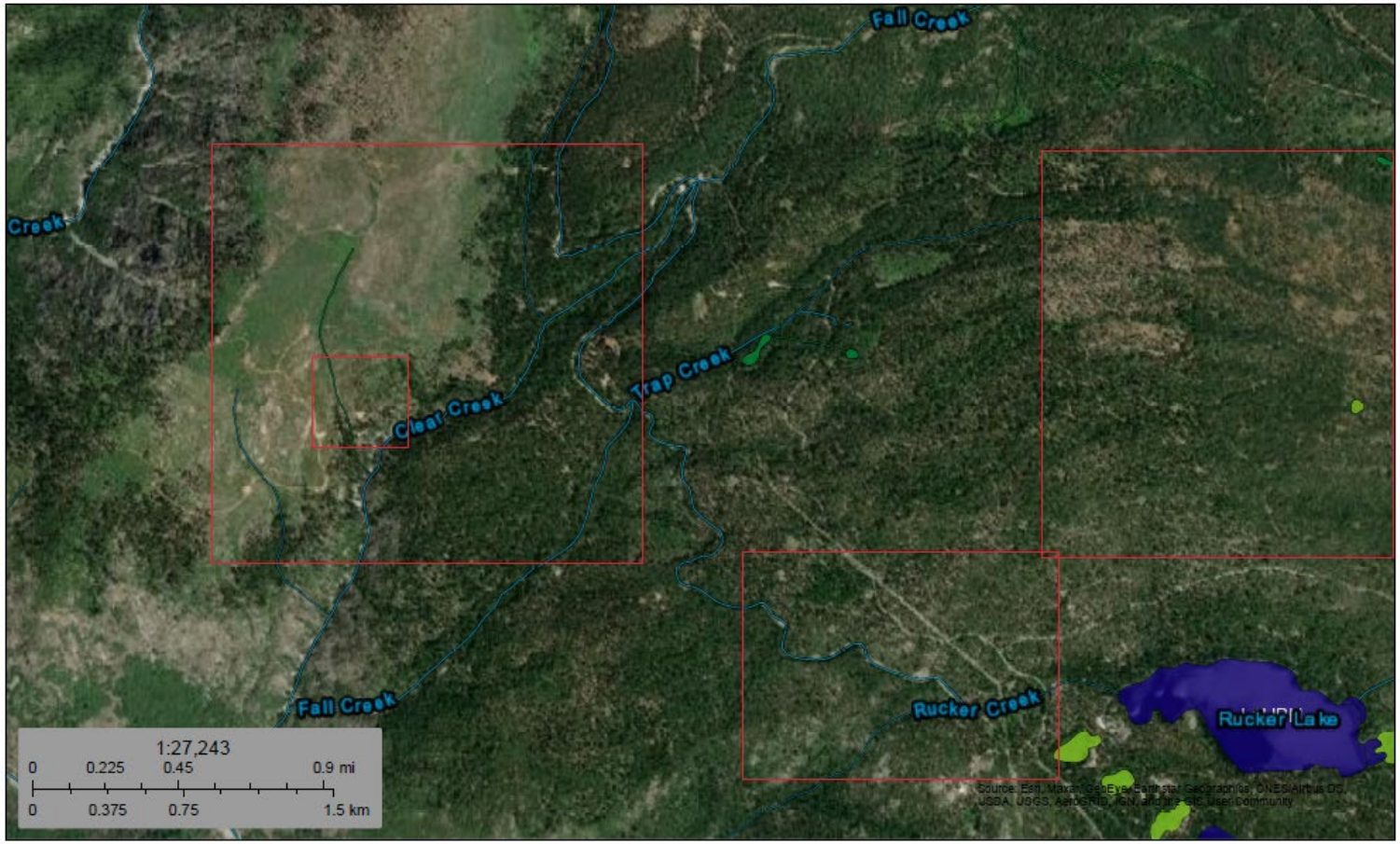


Map 2. AMEX Project Treatment Areas



U.S. Fish and Wildlife Service
National Wetlands Inventory

Grouse Ridge



June 11, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

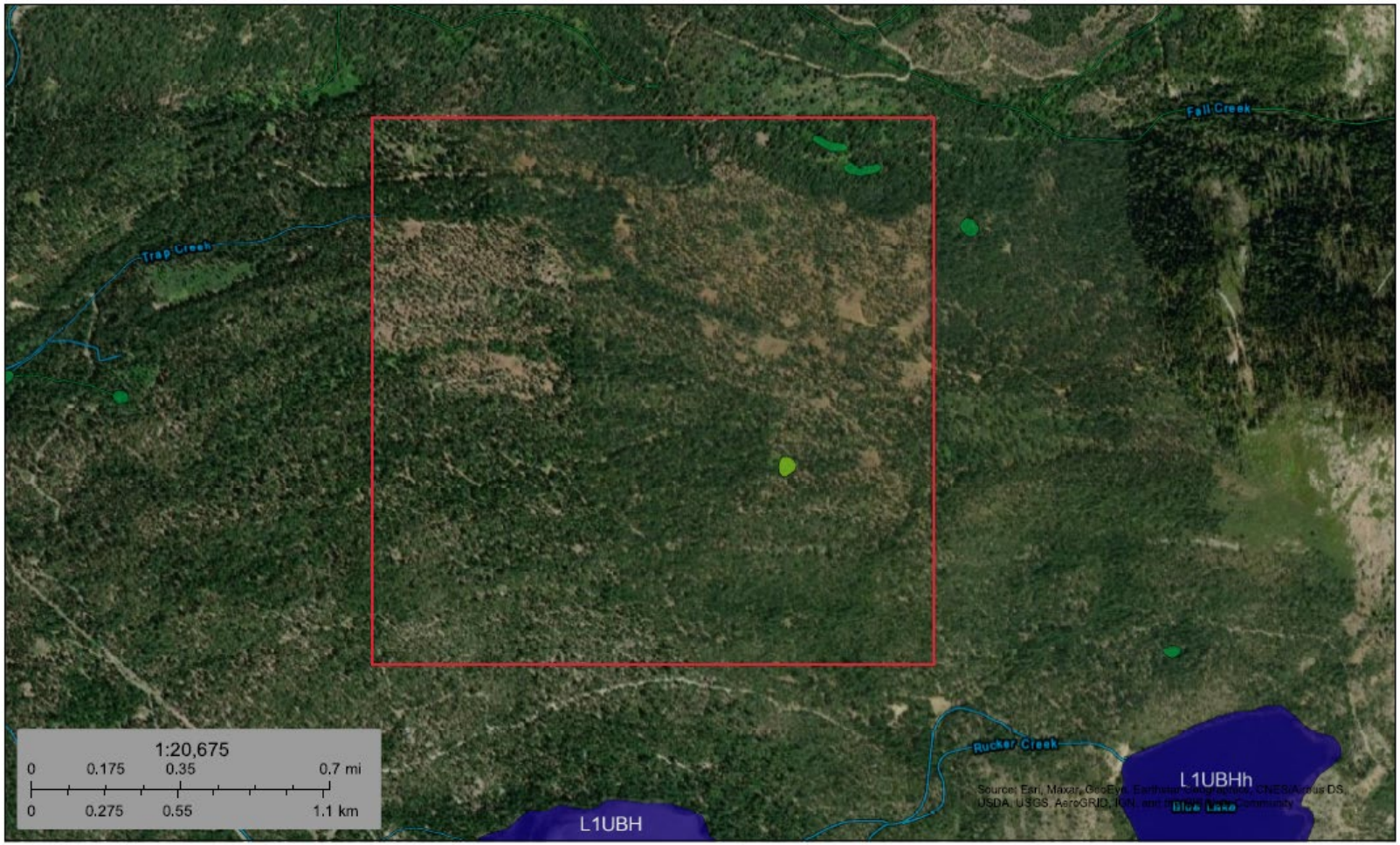
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

National Wetlands Inventory

Grouse Ridge sec 5



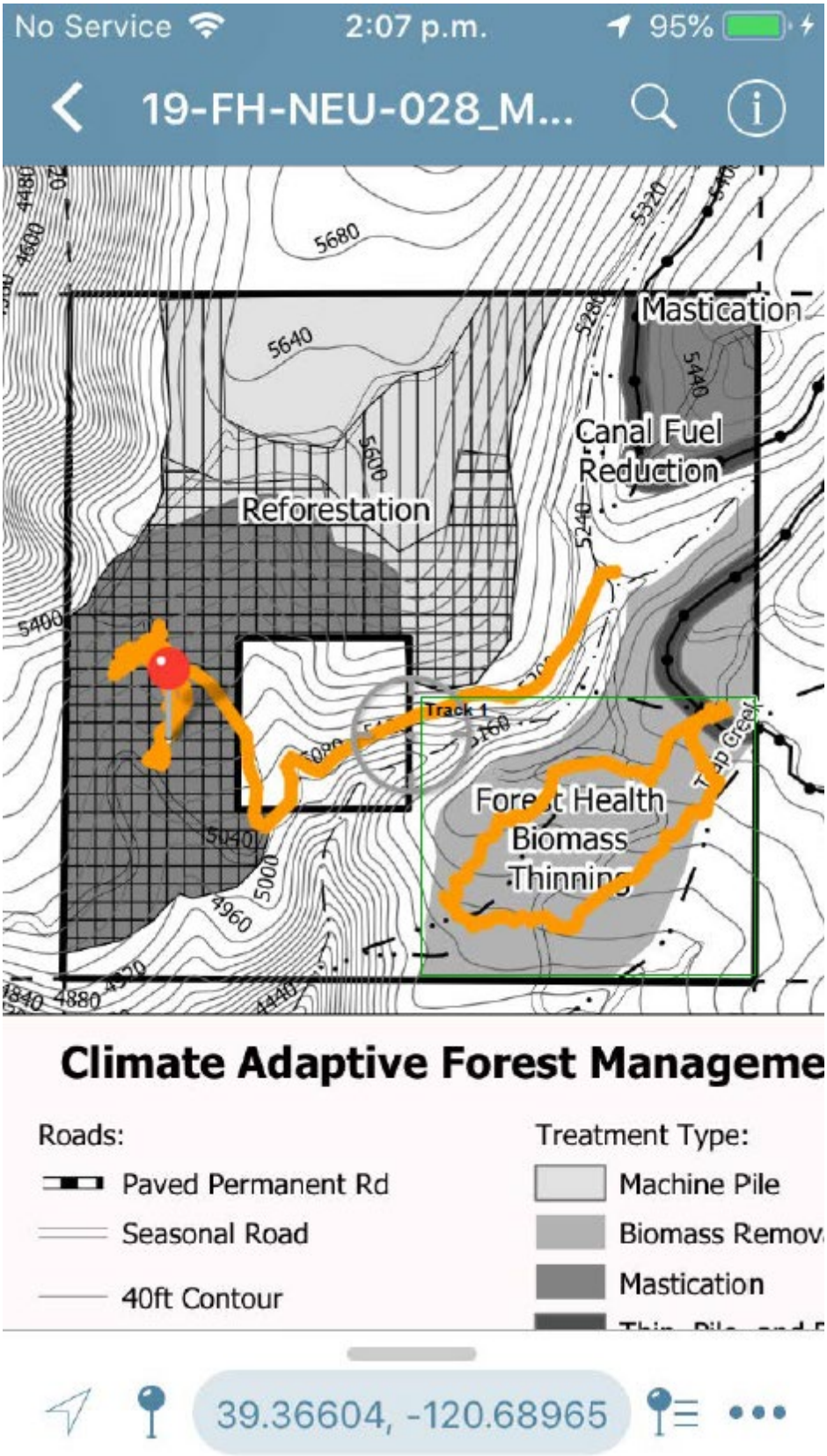
June 11, 2020

Wetlands

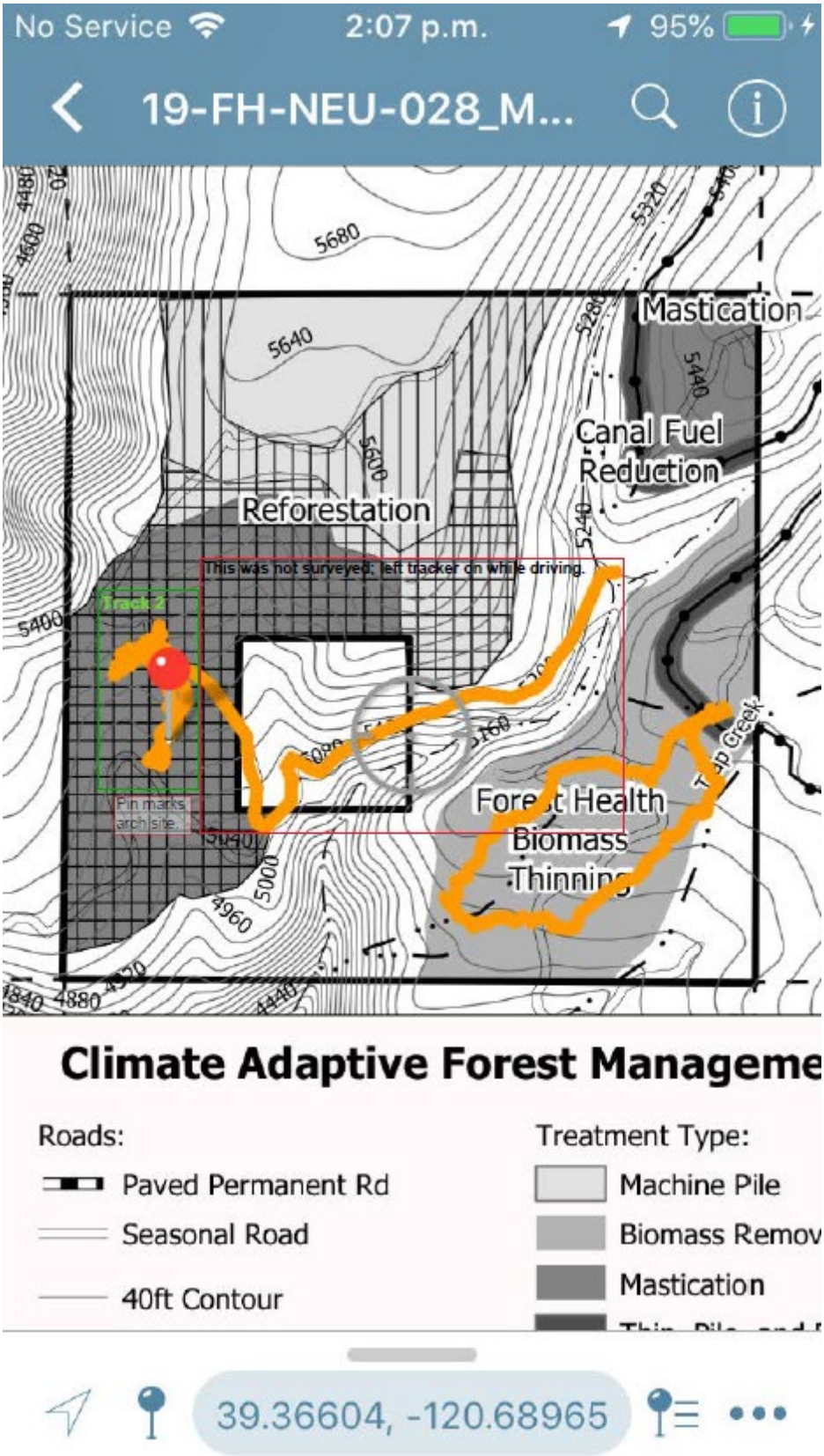
- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Lake
- Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

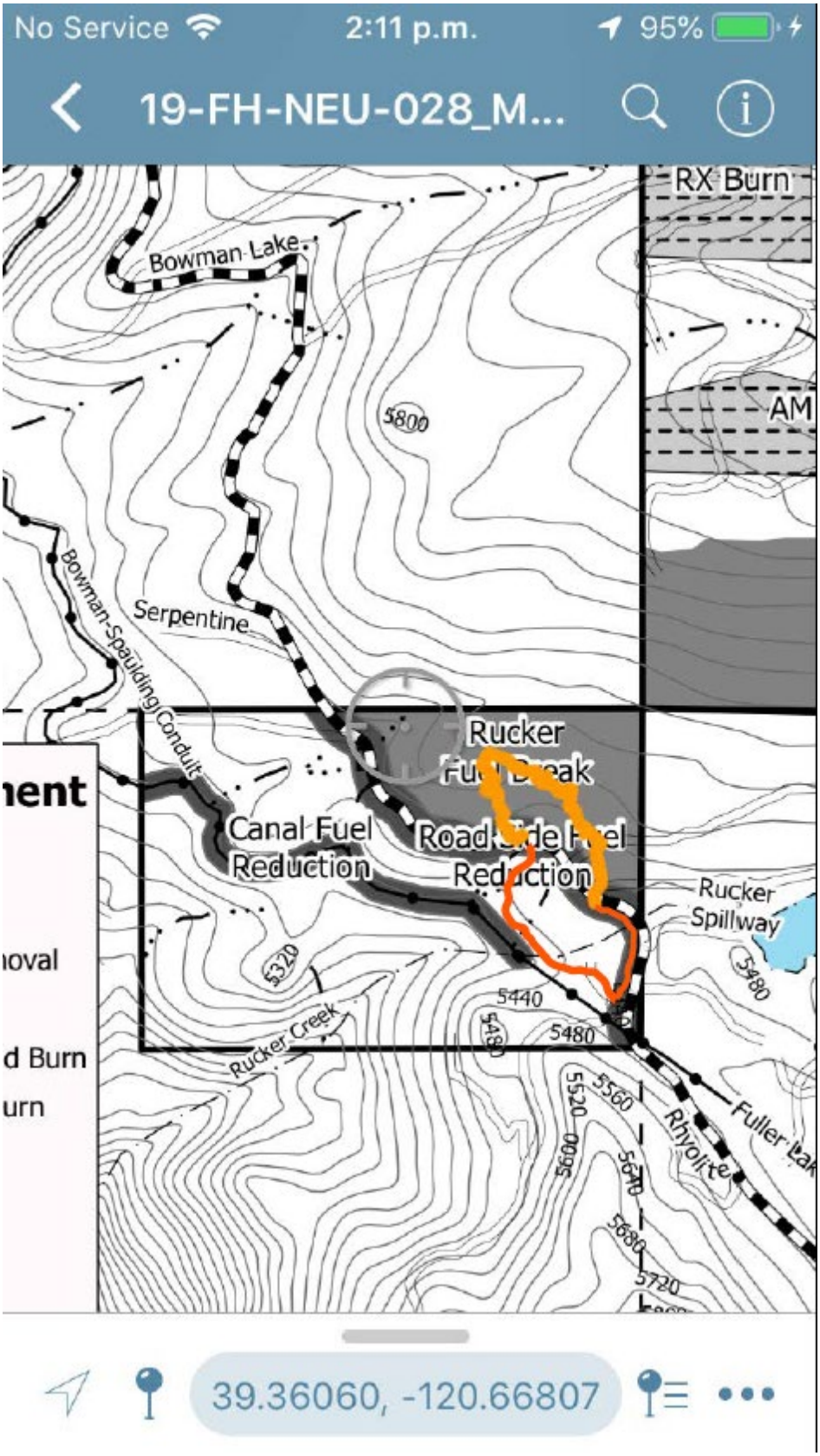
Section 1 Track 1



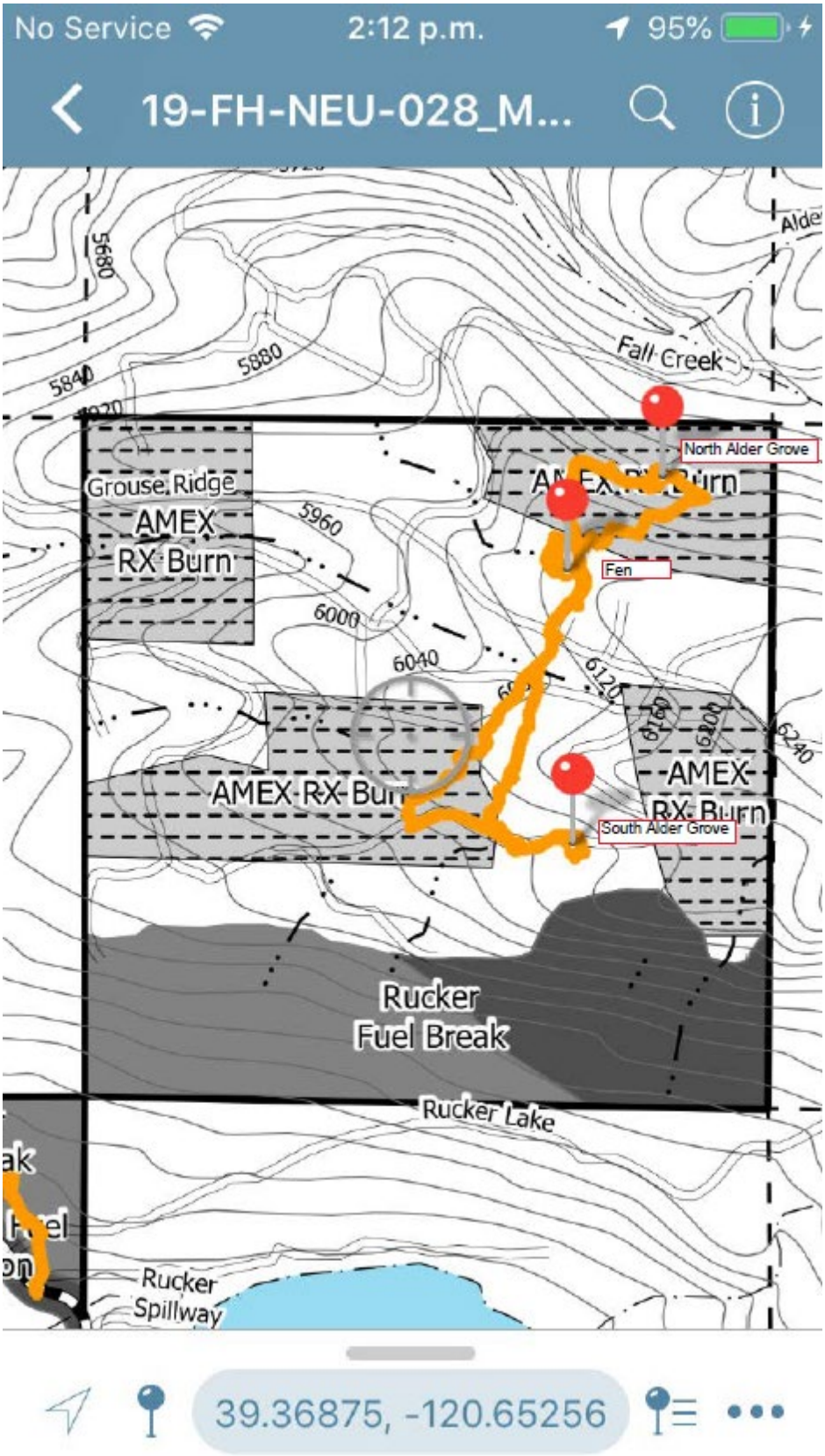
Section 1 Track 2



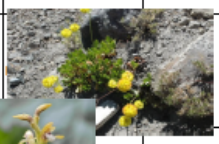
Section 7 Track



Section 5 Track



Appendix B: Target Species

Poa sierrae	**Ecology:** Shady moist slopes, often on mossy rocks, in canyons, forest			coniferous forest	Of course there were many grass species, most of which were not yet blooming. This grass has a very unique flowering head. We didn't find it.
Phacelia stebbinsii	**Habitat:** meadows, **Communities:** foothill woodland,yellow pine forest; **Ecology:** Gravelly soils, meadows, conifer forest			ntane woodland r montane coniferous forest lows and seeps	We found at least 2 phacelias: Phacelia hydrophylloides, Phacelia hastata, and a third we couldn't identify. Stebbin's Phacelia is very small and it's inflorescence is a spike not a curl. Leaves not a match either.
Rhamnus alnifolia	**Communities:** Red Fir Forest, Lodgepole Forest, wetland-riparian; **Ecology:** Wet meadow edges, seeps, stream sides		May-Jul	• Lower montane coniferous forest • Meadows and seeps • Riparian scrub • Upper montane coniferous forest	We found some plants that looked like they might be Rhamnus, however, without flowers, or fruits we couldn't do a positive ID, except the leaves were not thin enough to transmit light, nor were the tips acute.
Botrychium minganense	**Communities:** yellow pine forest; **Ecology:** Meadows, open forest along streams or around seeps		Jun-Sep	• Bogs and fens • Lower montane coniferous forest • Meadows and seeps (edges) r montane coniferous forest	Looked very hard to find either Botrychium species, just because they took my fancy. Found nothing like them.
Erigeron miser	**Communities:** red fir forest; **Ecology:** Rocky sites	starved daisy		 montane coniferous forest (rocky)	We did find two rayless sunflowers,that we identified as Arnica discoidea and Senecio aronicoides.
Lewisia serrata	**Habitat:** riparian; **communities:** yellow pine forest, mixed evergreen forest; **Ecology:** Metamorphic cliff faces, rocky outcrops, riparian scrub, woodland, conifer forest			y slopes. ed upland forest ntane coniferous forest orest	Lewisias are very distinctive, both flower and plant, and we did find one species, but definitely not either LESE or LECA. Lewisia triphylla.
Lewisia cantelovii	**Habitat:** riparian, seeps; **communities:** yellow pine forest, mixed evergreen forest, foothill woodland, chaparral, wetland-riparian; **Ecology:** Granite cliff faces, rocky outcrops, ravines, serpentine seeps, chaparral, woodland,			ranitic, sometimes serpentinite seeps. eafed upland forest rral ntane woodland montane coniferous forest	Lewisias are very distinctive, both flower and plant, and we did find one species, but definitely not either LESE or LECA. Lewisia triphylla.
Carex sheldonii	**Habitat:** riparian; **communities:** yellow pine forest, wetland-riparian; **Ecology:** Wet places			• Lower montane coniferous forest (mesic) • Marshes and swamps (freshwater) • Riparian scrub	There were many carex, several not blooming, but we didn't find anything with this long raceme. We believe that we found mostly Juncus nevadensis, which is not a sedge at all but a rush.
Carex davyi	**Communities:** subalpine forest, red fir forest; **Ecology:** Dry often sparse meadows, slopes	Davy's sedge	May-Aug	• Subalpine coniferous forest • Upper montane coniferous fo	 Can't really say one way or another, will include all photos of grass like species in report.
Eriogonum umbellatum var. torrey	**Habitat:** meadows; **communities:** lodgepole forest, red fir forest; **Ecology:** Sand or gravel			volcanic, rocky. • Meadows and seeps • Upper montane coniferous forest	It is seems that we did find a variety of E. umbellatum. It was not blooming, only in bud. The leaves were distinctively alike, but there was no whorl of bracts mid-branch in the inflorescence.
Corallorhiza trifida	**Habitat:** meadows, edges; **communities:** yellow pine forest, wetland-riparian; **Ecology:** Wet, open to shaded, generally conifer forest		Jun-Jul	• Lower montane coniferous forest • Meadows and seeps (edges)	Saw many coralroots, though not blooming, none of them were green like C. trifida.
Penstemon personatus	**Communities:** yellow-pine forest; **Ecology:** Yellow-pine, montane forests		un-Sep(Oct)	metavolcanic. • Chaparral • Lower montane coniferous forest • Upper montane coniferous forest	There was one variety of penstemon that was in plentiful supply (PERO?) but it was not tiny like this species (5 cm). Also, definitely not close-throated, and a darker blue/purple.

Appendix C: Species Identified

CAMO	Calyptridium monospermum
LECI	Leptosiphon ciliatus
SYMO	Symphoricarpus mollis
VISH	Viola sheltonii
RIRO	Ribes roezlii
PTAQ	Pteridium aquilinum
DITO	Diplacus torreyi
ROS-	Rosa
CRAF	Cryptantha affinis
CLRH	Clarkia rhomboidea
CAMA	Calystegia macrophylla
GAL-	Galium
HOTR	Horkelia tridentata
CHPO	Chlorogalum pomeridianum
CANU	Calochortus nudus
CACO	Calochortus coerylens
VILO	Viola lobata
CAR-	Carex
PERO	Penstemon roezlii
OSBE	Osmorhiza berteroi
CEIN	Ceanothus integerrimus
CHFO	Chamaebatia foliolosa
ASPR	Asyneuma prenanthoides
RUAC	Rumex acetosella
HYPE	Hypericum perforatum
RAOC	Ranunculus occidentalis
KEGA	Kellogia gallioides
AQFO	Aquilegia formosa
CECO	Ceanothus cordulatus
DIFO	Dicentro formosa
SCMU	Sceptridium multifidum
ADBI	Adenocaulon bicolor
HIAL	Hieracium albiflorum
SILE	Silene lemmonii
RHOC	Rhododendron occidentalis
GOOB	Goodyera oblongifolia
PESE	Pedicularis semibarbata
IRHA	Iris hartwegii
SASA	Sarcodes sanguinea
CEPR	Ceanothus prostratus

COMA	Corallorhiza maculata
ARPA	Arctostaphylos patula
CHUM	Chimaphila umbellata
COTO	Collinsia torreyi
TRIX	Triteleia ixioides
VIPU	Viola pururea
DINA	Diplacus nanus
HOIN	Hosackia incana
HEMI	Hemizonella minima
ERLA	Eriophyllum lanatum
DIHO	Disporum hookeri
ERMO	Erythranthe moschata
CAMI	Calochortus minimus
SATU	Sanicle tuberosa
PRU-	Prunus
FRA-	Frangula
MAGL	Madia glomerata
ERNU	Eriogonum nudum
ARVI	Arctostaphylos viscida
APAN	Apocynum androsaemifolium
moss	
ERPR	Erythranthe primuloides
HYAN	Hypericum anagalloides
HOOB	Hosackia oblongifolia
VECA	Veratrum californicum
goldback fern	Pentagtamma triangularis
CHSE	Chinquapin sempervirens
BOY-	Boykinia
VIMA	Viola mackloskeyi
CHME	Chimaphila menziesii
GAY-	Gayophytum
DRGL	Drymocallis glandulosa
SETR	Senecio triangularis
MARA	Mainanthemum racemosum
MAST	Maianthemum stellata
RUPA	Rubus parviflorus
LIL-	Lily
ALDER	alder
ERGU	Erythranthe guttatus
CIAL	Circaea alpina
THFE	Thalictrum fendleri
EPI-	Epilobium

BAOR	Barbarea orthoceras
PEBR	Pectiantia breweri
LOT-	Lotus
PYPI	Pyrola picta
LUP-	Lupine
TOVE	Toxicoscordion venenosum
ARDE	Arnica dealbata
CACA	Cardamine californica
SIGL	Sidalcea glaucescens
VIGL	Viola glabella
QuVA	Quercus vacciniifolia
ALCA	Allium campanulatum
SPRU	Spergularia rubra
PTAN	Pterospora andromedea
CLRU	Claytonia rubra
TRDU	Trapopogon dubius
NALO	Nama lobbii
ARDI	Arnica discoidea
EQI-	Equisetum
PITR	Piperia transversa
POL-	Polystichum
ELEL	Elymus elymoides
BRTE	Bromus tectorum
COSE	Cornus sericea
RINE	Ribes nevadense
ERCA	Eriodictyon californicum
SCCA	Scutellaria californica
ORAL	Oreostemma alpogenum var andersonii
PHHY	Phacelia hydrophylloides
PHHA	Phacelia hastata
DIMU	Dichelostemma multiflorum
LETR	Lewisia triphylla
COAR	Convolvulis arvensis
GICA	Gilia capitata ssp mediomontana
CRSI	Cryptantha simulans
SEAR	Senecio aronicoides
ERUM	Eriogonum umbellatum
RRCU	Rorippa curvisiliqua

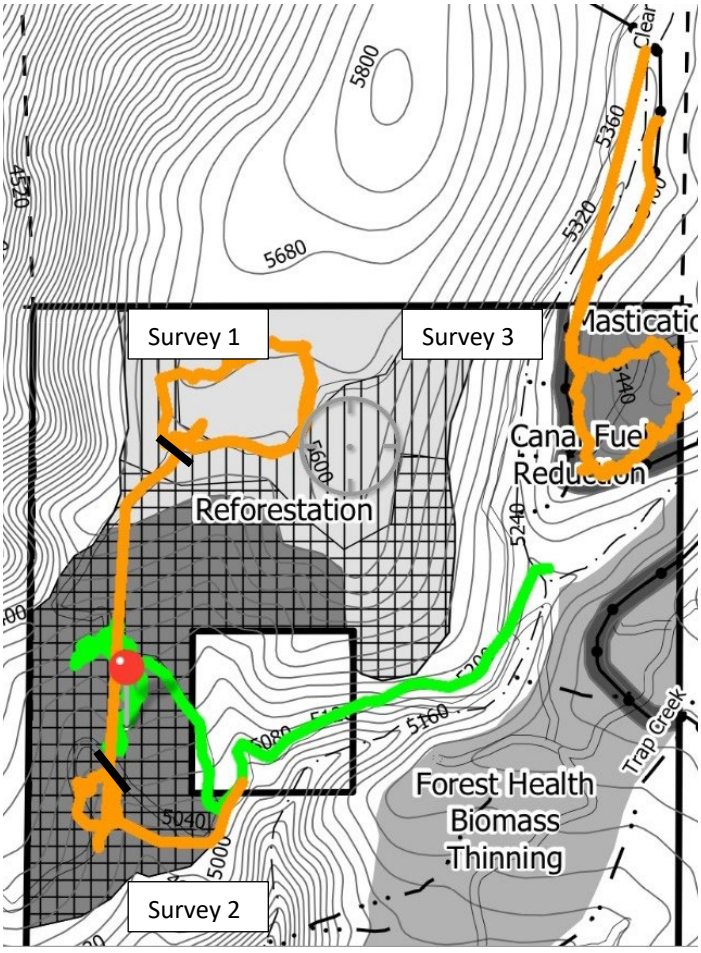
Grouse Ridge Research Forest

Rare Plant Survey –September 23 and 24, 2020

Amy Mason and Zach Mason

In order to fulfill CEQA requirements, an initial botanical survey for special status native plants was made of the Berkeley Forest known as Grouse Ridge (Map 1 & 2) on June 24 and 25, 2020. An additional survey was done in the autumn of 2020 to cover the flowering/fruiting period for all potential sensitive species. See June report for background information.

Multiple sites were revisited, specifically the so-called fen areas to determine if water was still present. No water was present, areas were quit dry, however this could be different in a wetter year. A specimen of *Eriogonum umbellatum* was relocated to confirm that it was not *E. umbellatum var. torreyanum* which is a rare species. It did not have the distinctive leaves midway up the pedicles and was determined to not be *var. torreyanum*. Some new species were identified, nothing that could determine to be rare, as well as one aggressive invasive species, *Centaurea stoebe*, which will need to be addressed. There are plants we could not identify, especially those in the grass-like families. New areas were surveyed to insure adequate coverage of all vegetation types.



Section 1: Burn area and Second Growth

Marker: Mortars

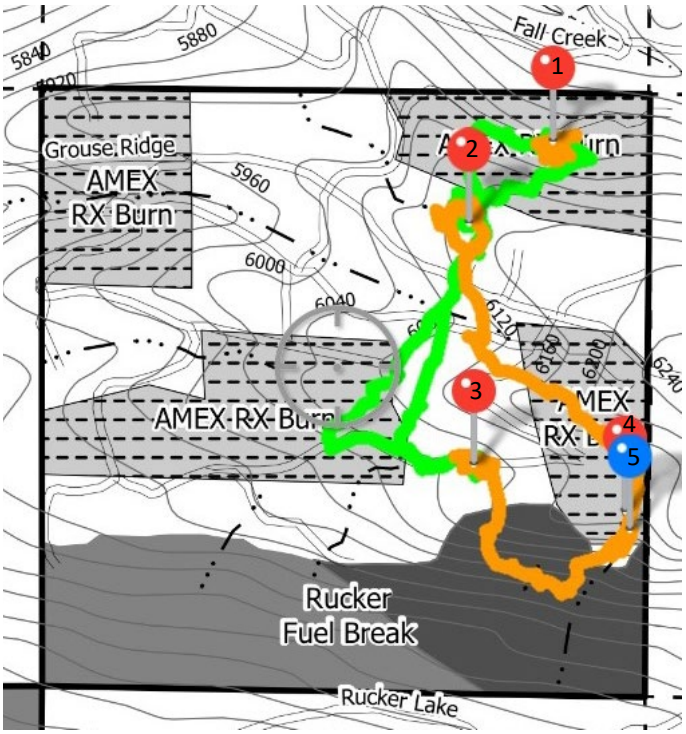
Drove north to south between black lines.

Green trail was from June, orange trail on Sept 24.

Survey 1: top of burned/reforested area – location of CEST

Survey 2: Burned area/PP Plantation

Survey 3: Mastication



Section 5: the “fen” areas

1 North Alder Grove

2 “Fen”

3 South Alder Grove

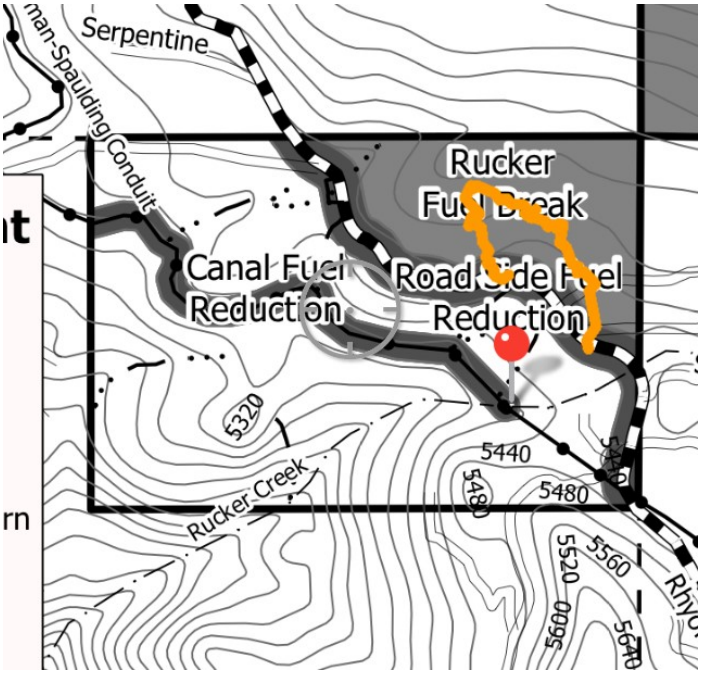
4 Game trail

5 Water in creek

Green trail was from June, orange trail on Sept 24.

Survey 4: North Alder Grove

Survey 5: Transect to South Alder Grove



Section 7: Second growth and Canal

Orange trail was from June.

Marker is location of ERUM.

Survey 6: Spot check on ERUM.

No rare species identified in pre-survey research were identified. However, there is some difficulty with identifying the grasses and the sedges. Seventeen species not found in the initial survey were identified and listed below. Also the phacelias may need to be examined more closely. It was determined that the areas identified as fens do not meet the definition of fens, but rather ephemeral pools. These areas wouldn't support several of the rare species we were surveyed for.

EPCA	Epilobium canum	california fushia	
CEST	Centaurea stoebe	spotted knapweed	invasive
QUKE	Quercus kellogia	black oak	
GADI	Gayophytum diffusum	ground smoke	
FRRU	Frangula rubra	sierra coffeeberry	
ERIN	Erigeron inornatus	rayless fleabane	
ERCU	Ericameria cuneata	wedge-leaf goldenbush	
ORSE	Orthilla secunda	one-sided wintergreen	
SYSP	Symphotrichum spathulatum	western mt. aster	
PRSU	Prunus subcordata	sierra plum	
VIOP	Viburnum opulus	european cranberry	not native
BOMA	Boykinia major	large brookfoam	
BOOC	Boykinia occidentalis	western boykinia	
SAM-	Sambucus	elderberry	
HEVI	heterotheca villosa	Hairy goldenaster	
SEOR	Seriocarpus oregonensis	oregon white-tipped aster	
ATFI-FE	Athyriuknfilix-femina	lady fern	

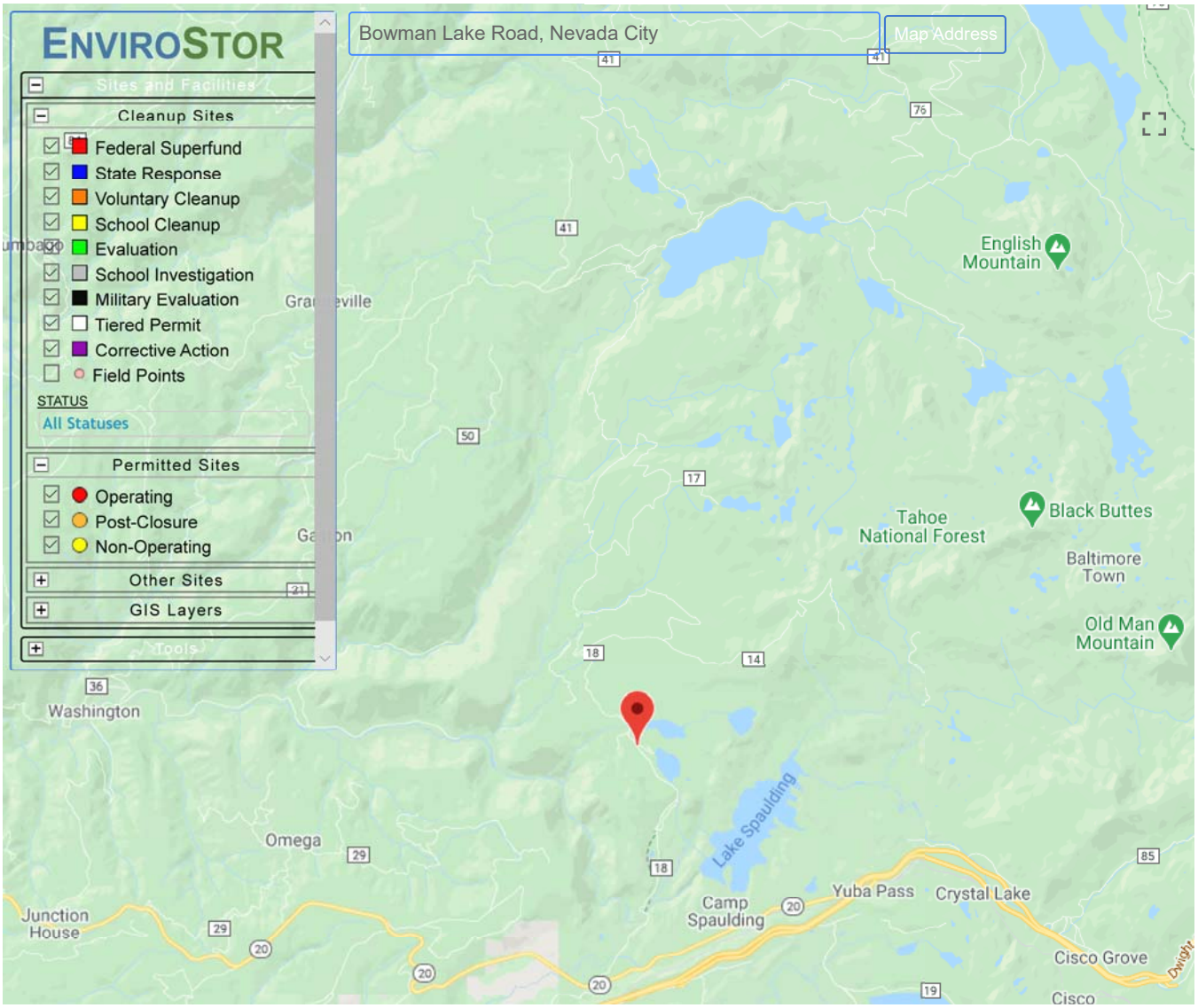
See Species Identified and GR Rare plants.photos.Sept in Rare Plant Survey< Grouse Ridge< PGE Stewardship Lands<Sequoia.

Attachment C

Hazards Database Results

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

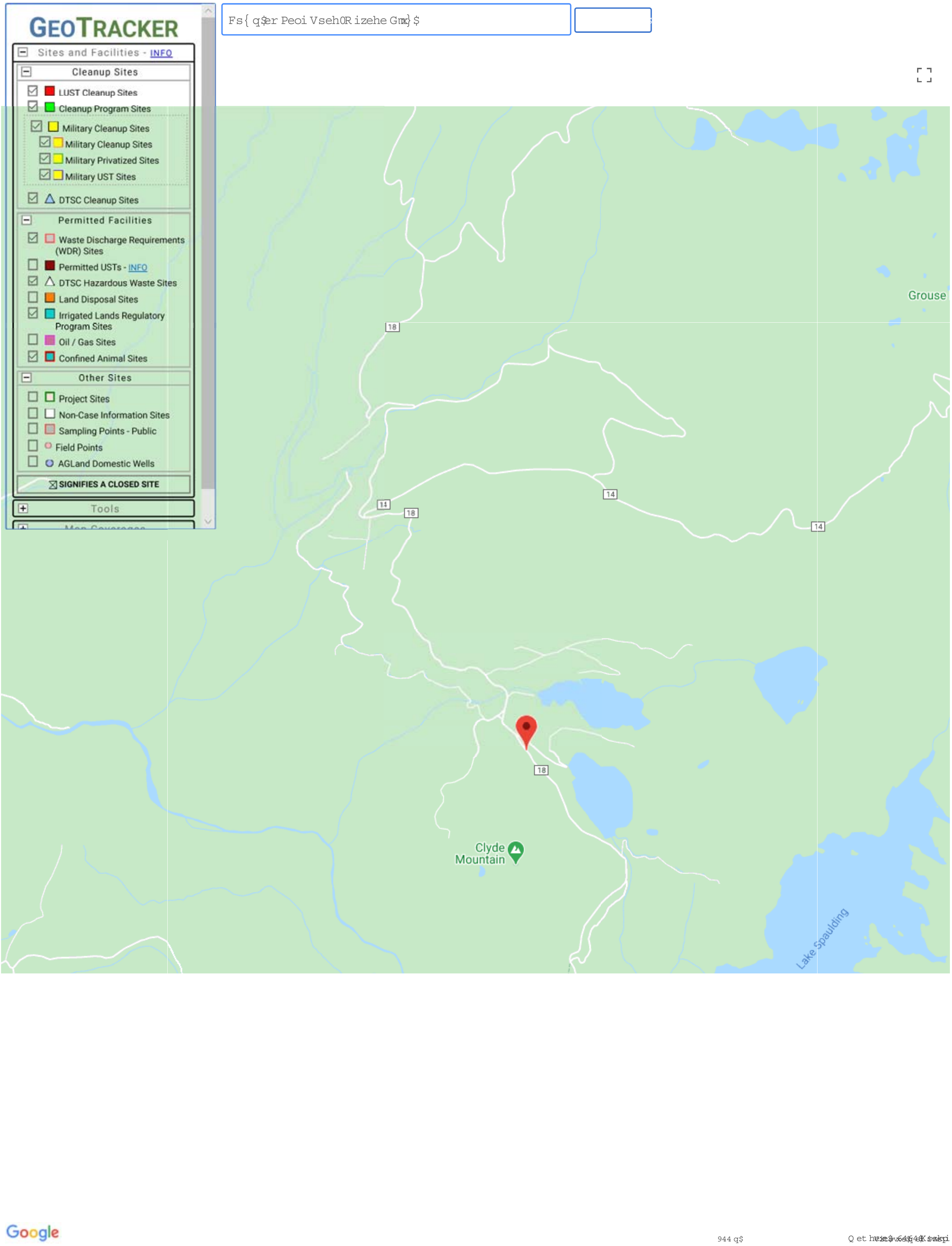
COUNTY	CITY	REGION	SWAT F	WASTE DISCHARGER SYSTEM NO.	SOLID WASTE ID NO.	WASTE MANAGEMENT UNIT NAME	FACILITY NAME	AGENCY NAME
DEL NORTE	CRESCENT CITY	1	2	1A880520NSL-01		DEL NORTE COUNTY- PESTICIDE STORAGE	DEL NORTE PESTICIDE STORAGE AR	DEL NORTE, COUNTY OF
CONTRA COSTA	PITTSBURG	2	1	2 071059002-02	07-A1-0001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



Google

EXPORT THIS LIST TO EXCEL

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY



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