

# Attachment A

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Mitigation Monitoring and  
Reporting Program for the  
Sonoma Land Trust Preserves  
Vegetation Treatment Project































Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p><b>SPR BIO-2: Require Biological Resource Training for Workers.</b> The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>Sensitive Natural Communities and Other Sensitive Habitats</b></p>				
<p><b>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.</b> If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:</p> <ul style="list-style-type: none"> <li>▶ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities” (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of <i>A Manual of California Vegetation</i> (including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>), or referring to relevant reports (e.g., reports found on the VegCAMP website).</li> <li>▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ Prior to implementation of treatment activities within grassland habitats, SPR BIO-3 will be conducted within grassland habitats where natural communities have not been previously mapped to the alliance level.</li> </ul>				
<p><b>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.</b> Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:</p> <ul style="list-style-type: none"> <li>▶ Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.</li> <li>▶ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.</li> <li>▶ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.</li> <li>▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

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<p>otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see <i>Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service</i>.</p> <ul style="list-style-type: none"> <li>▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.</li> <li>▶ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.</li> <li>▶ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.</li> <li>▶ The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.</li> <li>▶ 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.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				

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<p><b>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.</b> The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).</p> <p>During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area.</p> <p>For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:</p> <ul style="list-style-type: none"> <li>▶ Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale.</li> <li>▶ The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion.</p> <p>These SPR requirements apply to all treatment activities and all treatment types, including treatment maintenance.</p> <p>Additional measures will be applied to ecological restoration treatment types:</p> <ul style="list-style-type: none"> <li>▶ For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types.</li> <li>▶ Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved.</li> <li>▶ A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology.</li> <li>▶ If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity.</li> </ul> <p>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.</p> <p>A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the</p>				

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<p>PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion would not occur, as required by SB 1260. The project proponent will determine its criteria for defining and avoiding type conversion and, in making its findings, may draw upon information presented in this PEIR.</p>				
<p><b>SPR BIO-6: Prevent Spread of Plant Pathogens.</b> When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of <i>Phytophthora</i> and other plant pathogens (e.g., pitch canker (<i>Fusarium</i>), goldspotted oak borer, shot hole borer, bark beetle):</p> <ul style="list-style-type: none"> <li>▶ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk;</li> <li>▶ include training on <i>Phytophthora</i> diseases and other plant pathogens in the worker awareness training;</li> <li>▶ minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment;</li> <li>▶ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;</li> <li>▶ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and</li> <li>▶ follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (<i>Working Group for Phytoptheras in Native Habitats 2016</i>).</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>SPR BIO-7: Survey for Special-Status Plants.</b> If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

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<p>of CDFW’s “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.”</p> <p>Surveys to determine the presence or absence of special-status plant species will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status.</p> <p>If potentially occurring special-status plants are listed under CESA or ESA, protocol-level surveys to determine presence/absence of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.</p> <p>For other special-status plants not listed under CESA or ESA, as defined in Section 3.6.1 of this PEIR, surveys will not be required under the following circumstances:</p> <ul style="list-style-type: none"> <li>▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.</li> <li>▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ If the limited operating period for annual species and perennial geophyte species (i.e., non-ground-disturbing treatment activities conducted during the dormant season) is determined to be infeasible, then protocol-level surveys for these species will be conducted prior to implementation of treatments.</li> </ul>				

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<b>Invasive Plants and Wildlife</b>				
<p><b>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.</b>                      The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):</p> <ul style="list-style-type: none"> <li>▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;</li> <li>▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;</li> <li>▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;</li> <li>▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;</li> <li>▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;</li> <li>▶ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<ul style="list-style-type: none"> <li>▶ implement Fire and Fuel Management BMPs outlined in the “Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers” (Cal-IPC 2012, or current version).</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<b>Wildlife</b>				
<p><b>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.</b> If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.</p> <p>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.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ To avoid impacts on California giant salamander and red-bellied newt, focused surveys (i.e., walk and turn surveys) would be conducted in habitat suitable for the species within 300 feet of aquatic habitat (i.e., streams, ponds, wetlands, seeps) prior to implementing treatment activities within 300 feet of aquatic habitat.</li> <li>▶ If the 200-foot buffer adjacent to perennial (i.e., Class I and Class II) streams for foothill yellow-legged frog is determined to be infeasible, to avoid impacts on the species, then focused visual encounter surveys for foothill yellow-legged frog would be conducted within habitat areas suitable for the species prior to treatment activities within 200 feet of perennial streams.</li> <li>▶ To avoid impacts on western pond turtle, focused visual encounter surveys for the species and for potentially suitable burrows would be conducted within</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b>  <b>Refer to Table 4.5-1 in the PSA/Addendum for the special-status plant and wildlife species that may occur in each preserve.</b></p>	<p>No more than 14 days prior to treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>



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<p>habitat areas suitable for the species prior to treatment activities within 1,500 feet of aquatic habitat (i.e., Class I and Class II streams, ponds). If burrows potentially suitable for western pond turtle are detected, the qualified RPF or biologist will inspect the burrow to determine whether it is occupied (e.g., using a burrow scope).</p> <ul style="list-style-type: none"> <li>▶ If the limited operating period for nesting birds is determined to be infeasible, to avoid impacts on special-status birds (i.e., American peregrine falcon [coastal preserves only], burrowing owl, golden eagle, grasshopper sparrow, loggerhead shrike, long-eared owl, purple martin, tricolored blackbird [Russian River Watershed preserves only], Vaux's swift, white-tailed kite, yellow warbler, yellow-breasted chat), focused surveys (i.e., nest searches) for nests of these species will be conducted prior to implementing treatment activities during the nesting bird season (February 1–August 31).</li> <li>▶ To avoid impacts on American badgers, a focused survey for the species and for potential dens will be conducted prior to implementing treatments in habitat suitable for the species (i.e., grassland, open woodland).</li> <li>▶ If the limited operating period for ringtail is determined to be infeasible, to avoid impacts on the species, focused surveys for ringtail, including non-invasive survey methods (e.g., trail cameras, track plates), will be conducted prior to implementing mechanical treatments and prescribed burning during the ringtail maternity season (April 15–June 30). Non-invasive focused surveys will be conducted for at least two weeks and a sufficient number of cameras and/or track plates will be used to maximize the likelihood of ringtail detection. Alternatively, if the limited operating period for ringtail is determined to be infeasible, ringtail may be assumed present and Mitigation Measure BIO-2a will be implemented.</li> <li>▶ If the limited operating period for special-status bat maternity colonies is determined to be infeasible, to avoid impacts on special-status bats (i.e., pallid bat, Townsend's big-eared bat, western red 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) in suitable habitat (e.g., mature trees, culverts, bridges).</li> </ul> <p>If any of the above species are detected during surveys or assumed present, refer to mitigation measures BIO-2a or BIO-2b for avoidance requirements.</p>				
<p><b>SPR BIO-12. Protect Common Nesting Birds, Including Raptors.</b> The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

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<p>special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist.</p> <p>If active nesting season avoidance is not feasible, a qualified RPF or biologist will conduct a survey for common nesting birds, including raptors. Existing records (e.g., CNDDDB, eBird database, State Wildlife Action Plan) should be reviewed in advance of the survey to identify the common nesting birds, including raptors, that are known to occur in the vicinity of the treatment site. The survey area will encompass reasonably accessible areas of the treatment site and the immediately surrounding vicinity viewable from the treatment site. The survey area will be determined by a qualified RPF or biologist, based on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).</p> <p>If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following:</p> <ul style="list-style-type: none"> <li>▶ <b>Establish Buffer.</b> The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding 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.</li> </ul>		<p>nests and the reasonable consideration of potential avoidance strategies (no more than 14 days before treatment); if an active nest is observed, implement avoidance strategies prior to and during treatment</p>		

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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>► <b>Retention of Raptor Nest Trees.</b> Trees with visible raptor nests, whether occupied or not, will be retained.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p><b>Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements</b></p>				
<p><b>SPR GEO-1 Suspend Disturbance during Heavy Precipitation:</b> The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <p>To prevent herbicides from being mobilized and soil from being compacted which increases runoff and erosion risk, the project proponent will suspend mechanical and herbicide treatments if: (1) it is raining, (2) soils are saturated, and/or (3) soils are wet enough to mobilize herbicides or be compacted by mechanical activities. The project proponent will be prepared to completely suspend mechanical and herbicide treatment activities prior to the initiation of the rain event. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer very wet or saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of very wet or saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, (5) inadequate traction without blading wet soil or surfacing materials, or (6) tire track imprints in the soil. This SPR applies only to mechanical and herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b></p> <p><b>Treatment Maintenance: Y</b></p> <p><b>All Preserves (Project-Specific Implementation for herbicides does not apply to the Pole Mountain Preserve)</b></p>	<p>During treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p><b>SPR GEO-2 Limit High Ground Pressure Vehicles:</b> The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>During treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>SPR GEO-3 Stabilize Disturbed Soil Areas:</b> The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>During mechanical and prescribed burn activities that result in exposure of bare soil over 50 percent or more of the treatment area</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>SPR GEO-4 Erosion Monitoring:</b> The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., <math>\geq 1.5</math> inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season; if erosion control measures are not properly implemented, remediate prior to the first rainfall event; inspect for evidence of erosion after the first large storm or rainfall event (i.e., <math>\geq</math></p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
		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		
<p><b>SPR GEO-5 Drain Stormwater via Water Breaks:</b> The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(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.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	During mechanical, manual, and prescribed burn treatment activities	Sonoma Land Trust	Sonoma Land Trust
<p><b>SPR GEO-6 Minimize Burn Pile Size:</b> The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	During mechanical, manual, and prescribed burn treatment activities	Sonoma Land Trust	Sonoma Land Trust
<p><b>SPR GEO-7 Minimize Erosion:</b> To minimize erosion, the project proponent will:</p> <p>(1) Prohibit use of heavy equipment where any of the following conditions are present:</p> <ul style="list-style-type: none"> <li>(i) Slopes steeper than 65 percent.</li> <li>(ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.</li> <li>(iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.</li> </ul> <p>(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:</p> <ul style="list-style-type: none"> <li>(i) Existing tractor roads that do not require reconstruction, or</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	During treatment	Sonoma Land Trust	Sonoma Land Trust

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>(ii) New tractor roads flagged by the project proponent prior to the treatment activity.</p> <p>(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope.</p> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>				
<p><b>SPR GEO-8 Steep Slopes:</b> The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identify measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil 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.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment on slopes greater than 50 percent</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>Hazardous Material and Public Health and Safety Standard Project Requirements</b></p>				
<p><b>SPR HAZ-1 Maintain All Equipment:</b> The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer’s specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Inspect all equipment for leaks prior to treatment; inspect everyday thereafter until equipment is removed from the site; promptly remove any leaking equipment; maintain all diesel- and gasoline-powered equipment per manufacturer’s specifications and in compliance with all state and federal emissions requirements during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>SPR HAZ-5 Spill Prevention and Response Plan:</b> The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b></p>	<p>Prepare SPRP prior to beginning any herbicide treatment activities;</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to):</p> <ul style="list-style-type: none"> <li>▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;</li> <li>▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;</li> <li>▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Little Black Mountain Preserve, Live Oaks Preserve, Laufenburg Ranch Preserve</b></p>	<p>implement measures during herbicide treatment activities</p>		
<p><b>SPR HAZ-6 Comply with Herbicide Application Regulations:</b> The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following:</p> <ul style="list-style-type: none"> <li>▶ Be implemented consistent with recommendations prepared annually by a licensed PCA.</li> <li>▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions.</li> <li>▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation.</li> <li>▶ Be applied by an applicator appropriately licensed by the State.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y Treatment Maintenance: Y Little Black Mountain Preserve, Live Oaks Preserve, Laufenburg Ranch Preserve</b></p>	<p>Prior to treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>SPR HAZ-7 Triple Rinse Herbicide Containers:</b> The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer’s container recycling program, in which case the manufacturer’s instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or</p>	<p><b>Initial Treatment: Y Treatment Maintenance: Y Little Black Mountain Preserve, Live Oaks Preserve, Laufenburg Ranch Preserve</b></p>	<p>During herbicide treatment activities</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>



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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity																								
<p><b>SPR HYD-2 Avoid Construction of New Roads:</b> The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>																								
<p><b>SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:</b> The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZs are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.</p> <p><b>Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths</b></p> <table border="1" data-bbox="159 651 963 1239"> <thead> <tr> <th>Water Class</th> <th>Class I</th> <th>Class II</th> <th>Class III</th> <th>Class IV</th> </tr> </thead> <tbody> <tr> <td>Water Class Characteristics or Key Indicator Beneficial Use</td> <td>1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.</td> <td>1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.</td> <td>No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.</td> <td>Man-made watercourse usually downstream established domestic, agricultural, hydroelectric supply or other beneficial use.</td> </tr> </tbody> </table> <table border="1" data-bbox="159 1239 963 1468"> <thead> <tr> <th colspan="4">WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ</th> </tr> </thead> <tbody> <tr> <td>&lt; 30 % Slope</td> <td>75</td> <td>50</td> <td rowspan="3">Sufficient to prevent the degradation of downstream beneficial uses of water. Determined</td> </tr> <tr> <td>30-50 % Slope</td> <td>100</td> <td>75</td> </tr> <tr> <td>&gt;50 % Slope</td> <td>150</td> <td>100</td> </tr> </tbody> </table>	Water Class	Class I	Class II	Class III	Class IV	Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	Man-made watercourse usually downstream established domestic, agricultural, hydroelectric supply or other beneficial use.	WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ				< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined	30-50 % Slope	100	75	>50 % Slope	150	100	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Establish WLPZs during design of treatment project; implement WLPZ protections during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
Water Class	Class I	Class II	Class III	Class IV																								
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	Man-made watercourse usually downstream established domestic, agricultural, hydroelectric supply or other beneficial use.																								
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Standard Project Requirements				Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
			on a site-specific basis.				
<p>Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version)</p> <p>The following WLPZ protections will be applied for all treatments:</p> <ul style="list-style-type: none"> <li>▶ Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report. This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).</li> <li>▶ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.</li> <li>▶ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.</li> <li>▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.</li> <li>▶ Burn piles will be located outside of WLPZs.</li> <li>▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.</li> <li>▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.</li> <li>▶ Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses</li> </ul>							

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.</p> <ul style="list-style-type: none"> <li>▶ Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.</li> <li>▶ Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p><b>Project-Specific Implementation</b></p> <p>SPR HYD-4 will be refined for specific application to this project to include 1) the implementation of no-disturbance buffers of 300 feet around all ponds (including ponds on adjacent private property where the buffer extends into a treatment area) and 2) the requirement that no pile burning within 300 feet from any aquatic habitat (i.e., streams, ponds, wetlands, seeps) will occur.</p>				
<p><b>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:</b> The project proponent will implement the following measures when applying herbicides:</p> <ul style="list-style-type: none"> <li>▶ Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway.</li> <li>▶ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.</li> <li>▶ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>Little Black Mountain Preserve, Live Oaks Preserve, Laufenburg Ranch Preserve</b></p>	<p>During herbicide treatment activities</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA.</p> <ul style="list-style-type: none"> <li>▶ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools.</li> <li>▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray.</li> <li>▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative).</li> <li>▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.</li> </ul> <p>This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.</p>				
<p><b>SPR HYD-6 Protect Existing Drainage Systems:</b> If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Mark existing stormwater drainage infrastructure prior to ground disturbing activities; if a drainage structure or infiltration system is inadvertently disturbed or modified during treatment, coordinate with owner to repair damage and restore pre-project drainage conditions</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<p><b>Public Services and Utilities Standard Project Requirements</b></p>				
<p><b>SPR UTIL-1 Solid Organic Waste Disposition Plan.</b> For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prepare an Organic Waste Disposition Plan prior to mechanical or manual treatment activities; implement plan during mechanical or manual treatment activities</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Monitoring Entity
<p>Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Archaeological, Historical, and Tribal Cultural Resources</b>				
<p><b>Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</b></p> <p>If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with the project proponent to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with the project proponent to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>During ground-disturbing activities</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>
<b>Biological Resources</b>				
<p><b>Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA</b></p> <p>If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species’ vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.</p> <p>For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending on species status and location, that the listed plants would benefit from treatment in the occupied habitat area even though some of the listed plants may be lost during treatment activities. For a treatment to be considered beneficial to listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to listed plants, no compensatory mitigation for loss of individuals will be required.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ If special-status plant species are detected during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which treatments will not occur.</li> <li>▶ If special-status plant species are detected during protocol-level surveys, an evaluation of the appropriate treatment design and frequency to maintain habitat function within habitat suitable for special-status plants will be carried out by a qualified RPF, biologist, or botanist. Therefore, habitat function for special-status plants would be maintained because treatment activities and maintenance treatments would be designed to ensure that treatments, including follow-up maintenance, maintain habitat function for the special-status plant species present.</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</b></p> <p>If non-listed special-status plant species (i.e., species not listed under ESA or CESA, but meeting the definition of special-status as stated in Section 3.6.1 of the Program EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement the following measures to avoid loss of individuals and maintain habitat function of occupied habitat:</p> <ul style="list-style-type: none"> <li>▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species’ vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.</li> <li>▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank.</li> <li>▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.</li> <li>▶ No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer.</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>A qualified RPF or botanist with knowledge of the special-status plant species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment would not maintain habitat function of the special-status plant habitat (i.e., the habitat would be rendered unsuitable) or because the loss of special-status plants would substantially reduce the number or restrict the range of a special-status plant species. If the project proponent determines the impact on special-status plants would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status plants or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-1c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the special-status plants would benefit from treatment in the occupied habitat area even though some of the non-listed special-status plants may be killed during treatment activities. For a treatment to be considered beneficial to non-listed special-status plants, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status plants, no compensatory mitigation will be required.</p> <p><b>Project-Specific Implementation</b></p> <ul style="list-style-type: none"> <li>▶ If special-status plant species are detected during protocol-level surveys, a no-disturbance buffer of at least 50 feet will be established around the area occupied by the species within which treatments will not occur.</li> <li>▶ If special-status plant species are detected during protocol-level surveys, an evaluation of the appropriate treatment design and frequency to maintain habitat function within habitat suitable for special-status plants will be carried out by a qualified RPF, biologist, or botanist. Therefore, habitat function for special-status plants would be maintained because treatment activities and maintenance treatments would be designed to ensure that treatments, including follow-up maintenance, maintain habitat function for the special-status plant species present.</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><b>Mitigation Measure BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)</b></p> <p>If California Fully Protected Species or species listed under ESA or CESA are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid adverse effects to the species by implementing the following.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <p>The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:</p> <ol style="list-style-type: none"> <li>1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR</li> <li>2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species.</li> </ol> <p>► 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.</p> <p>Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided.</p> <p><u>Maintain Habitat Function</u></p> <p>► The project proponent will design treatment activities to maintain the habitat function, by implementing the following:</p> <ul style="list-style-type: none"> <li>▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> <li>▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.</li> </ul> <p>A qualified RPF or biologist <u>of the lead agency</u> 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. <del>If consultation determines</del> <u>If the lead agency determines after consultation</u> that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.</p> <p><b>Project-Specific Implementation.</b></p> <p>If California Fully Protected Species or species listed under ESA or CESA are observed during focused or protocol-level surveys (conducted pursuant to SPR BIO-10) or assumed present, the project proponent will avoid adverse effects to the species by implementing the following.</p> <ul style="list-style-type: none"> <li>▶ If the limited operating period for nesting birds is determined to be infeasible and an American peregrine falcon, golden eagle, or white-tailed kite nest is detected during focused surveys, a no-disturbance buffer of at least 0.5 mile (American peregrine falcon, golden eagle) or 0.25 mile (white-tailed kite) 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. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.</li> <li>▶ If the limited operating period for nesting birds is determined to be infeasible and a tricolored blackbird colony 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. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ If the limited operating period for ringtail is determined to be infeasible and ringtails are detected during focused surveys implemented under SPR BIO-10, 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 of at least 0.25 mile will be implemented around the den, and consultation with CDFW would be initiated.</li> <li>▶ If the limited operating period for ringtail is determined to be infeasible and presence of ringtails is assumed, then the following avoidance and minimization measures would be required:                             <ul style="list-style-type: none"> <li>▪ <b>Year-Round Take Avoidance Measures.</b> During mechanical treatment activities in heavy brush habitat (e.g., dense conifer saplings, blackberry, shrubs), and after the standard equipment warm-up period, heavy machinery activities in heavy brush habitat will be conducted slowly and cautiously. For example, the head of a masticator will pause above a patch of heavy brush for several seconds before removing the brush. A qualified RPF or biologist will explain this process to contractors and will observe mechanical treatments on the first day of work to ensure that the methods are understood and implemented properly; this could be combined with other pre-activity survey or contractor awareness training requirements. Contractors will watch for ringtail as they masticate in heavy brush. If a ringtail is observed, the contractor will direct treatment activities to halt, and the ringtail will be allowed to leave the area unharmed before treatment begins. If a ringtail is observed outside of maternity season, the qualified RPF or biologist will be contacted and will perform a sweep of the treatment area before work resumes. If the qualified RPF or biologist observes a resting ringtail or active non-maternity den, treatment activities will not occur within that day’s treatment area until the ringtail leaves the area on its own. If the qualified RPF or biologist observes a ringtail or confirms the contractor’s observation (i.e., based on contractor description or photograph), the occurrence will be reported to CDFW at Robynn.Swan@wildlife.ca.gov.</li> <li>▪ <b>Den Surveys.</b> Within seven days prior to the start of mechanical treatments during the ringtail maternity season, a qualified RPF or biologist will conduct a den search in the treatment area to be treated the next week. The qualified RPF or biologist will search for large trees (i.e., greater than 12 inches diameter at breast height [dbh]) with appropriate cavities (i.e., holes larger than 3 inches in diameter, cavities extending approximately 12 inches down from the cavity hole). If found, the qualified RPF or biologist will inspect the cavity using a cell phone with a flash, or other tools (e.g., borescopes) to determine whether ringtails are present. Areas (e.g., large trees) with appropriate den habitat, occupied or not, will be marked (i.e., with flagging,</li> </ul> </li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>spray paint), for inspection during future sweeps (as described below). The qualified RPF or biologist will also search for dens in dense brush habitat and will note any sightings of fleeing adult ringtails.</p> <ul style="list-style-type: none"> <li>• <b>Active Dens.</b> If active ringtail dens are discovered during a den survey or daily sweep, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and mechanical treatments will not proceed within the buffer until at least the end of the ringtail maternity season (June 30). The qualified RPF or biologist will confirm that the den is unoccupied before treatment activities resume. The 0.25-mile buffer would incorporate the den and an area greater than the typical ringtail home range in northern California (Wyatt, pers. comm., 2021). If an active den is discovered, CDFW (Robynn.Swan@wildlife.ca.gov) will be notified of the den and buffer location. CDFW will be provided an opportunity to visit the site and provide technical information on the size and shape of the den buffer.</li> <li>▪ <b>Daily Sweeps, Training, and Monitoring.</b> If active ringtail dens are not discovered, the following measures will be implemented to avoid inadvertent destruction of active dens that eluded detection during the den search as well as take of adult ringtails and kits.             <ul style="list-style-type: none"> <li>• <b>Daily Sweeps.</b> On the first morning of work for mechanical treatments, a qualified RPF or biologist will conduct a sweep of the area to be treated that and will search all habitat suitable for ringtails where mastication will occur that day (i.e., larger trees, heavy brush, rock piles) for active dens or adults, including the trees with cavities previously marked by the qualified RPF or biologist. On following days, a trained contractor will search all areas previously marked by the qualified RPF or biologist for active dens (see training requirements below under “Training and Monitoring”). If an active den is discovered during a daily sweep, the qualified RPF or biologist will be notified, all work will stop, a no-disturbance buffer of at least 0.25 mile will be implemented around the den, and the requirements described above under “Active Dens” will be followed.</li> <li>• <b>Training and Monitoring.</b> On the first morning of work for mechanical treatments, the qualified RPF or biologist will provide biological resource training (as required under CalVTP PEIR SPR BIO-2) for all contractors. In addition to standard biological resource training, the qualified RPF or biologist will provide additional training specific to ringtail that will include the following elements:                 <ul style="list-style-type: none"> <li>○ Description of ringtail appearance (i.e., physical features, typical size);</li> <li>○ Description of typical ringtail behavior;</li> </ul> </li> </ul> </li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>o Description of denning habitat suitable for ringtail, particularly in that week's treatment area. The approximate location of large trees with cavities that were previously marked will be noted;</li> <li>o Measures required during operation, including daily sweeps of habitat suitable for ringtail where mastication will occur that day (i.e., heavy brush habitat, previously marked tree cavities), year-round take avoidance measures, and required increased vigilance when operating in heavy brush;</li> <li>o Measures required if a ringtail is spotted (i.e., all work halts until a qualified RPF or biologist can conduct a den search and sweep; if the qualified RPF or biologist observes a ringtail or confirms the contractor's observation, the occurrence will be reported to CDFW at Robynn.Swan@wildlife.ca.gov);</li> <li>o Measures required if a ringtail den is found (i.e., 0.25-mile no-disturbance buffer and requirements described above under "Active Dens" will be followed);</li> <li>o Definition of and legal consequences for take of ringtail (i.e., \$10,000 fine for each take and/or 1 year in jail); and</li> <li>o Requirements for contacting CDFW (Robynn.Swan@wildlife.ca.gov), which include the following circumstances:                         <ul style="list-style-type: none"> <li>- ringtails observed during treatment activities (notify within 3 business days);</li> <li>- active ringtail den discovered (notify within 24 hours); and</li> <li>- take of ringtail occurs (notify within 24 hours).</li> </ul> </li> </ul>				
<p><b>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</b></p> <p>If other special-status wildlife species (i.e., species not listed under CESA or ESA or California Fully Protected, but meeting the definition of special status as stated in Section 3.6.1 of the Program EIR) are observed during reconnaissance surveys (conducted pursuant to SPR BIO-1) or focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following.</p> <p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <ul style="list-style-type: none"> <li>▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:</li> </ul> <p>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,</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> <li>▪ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other 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.</li> <li>▪ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.</li> </ul> <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> <li>► For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following:</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.</li> <li>▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained.</li> <li>▶ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function.</li> </ul> <p>A qualified RPF or biologist with knowledge of the special-status wildlife species habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status wildlife species' habitat or because the loss of special-status wildlife would substantially reduce the number or restrict the range of a special-status wildlife species. If the project proponent determines the impact on special-status wildlife would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status wildlife or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the non-listed special-status wildlife would benefit from treatment in the occupied habitat area even though some of the non-listed special-status wildlife may be killed, injured, or disturbed during treatment activities. For a treatment to</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>be considered beneficial to non-listed special-status wildlife, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination that a non-listed special-status species would benefit from the treatment.</p> <p><b>Project-Specific Implementation</b></p> <p>If other (i.e., non-listed) special-status wildlife species are observed during focused or protocol-level surveys (conducted pursuant to SPR BIO-10), the project proponent will avoid or minimize adverse effects to the species by implementing the following.</p> <ul style="list-style-type: none"> <li>▶ If California giant salamanders, red-bellied newts, foothill yellow-legged frogs, or western pond turtles are detected during focused visual encounter surveys, the applicant would develop and implement treatment design modifications, in consultation with CDFW, which would include but not be limited to relocation of individual animals by an RPF or qualified biologist with a valid CDFW Scientific Collecting Permit, installation of exclusionary fencing, implementation of protective buffers within which no treatments would occur, or other measures recommended by CDFW as necessary to ensure that no injury to or mortality of these species would occur.</li> <li>▶ If the limited operating period for nesting birds is determined to be infeasible and a burrowing owl nest is detected during focused surveys, a no-disturbance buffer of at least 164 feet (50 meters) 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. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.</li> <li>▶ If the limited operating period for nesting birds is determined to be infeasible and a grasshopper sparrow, loggerhead shrike, long-eared owl, purple martin, Vaux's swift, yellow warbler, or yellow-breasted chat 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. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.</li> <li>▶ If an active American badger den is detected during focused surveys, a no-disturbance buffer of at least 500 feet will be established around the den, and no</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>treatment activities will occur within this buffer until the den is no longer occupied as determined by a qualified RPF or biologist. Buffer size may be reduced or adjusted if recommended by a qualified biologist in consultation with CDFW.</p> <ul style="list-style-type: none"> <li>▶ If the limited operating period for special-status bats is determined to be infeasible and an active pallid bat, Townsend’s big-eared bat, or western red bat roost is detected during focused surveys, then a no-disturbance buffer of 250 feet will be established around the roost, and mechanical treatments, manual treatments, and prescribed burning will not occur within this buffer.</li> </ul>				
<p><b>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</b></p> <p>The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to SPR BIO-3:</p> <ul style="list-style-type: none"> <li>▶ Reference the <i>Manual of California Vegetation</i>, Appendix 2, Table A2, <i>Fire Characteristics</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.</li> <li>▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California’s Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.</li> <li>▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).</li> <li>▶ 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.</li> </ul>	<p>Initial Treatment: Y Treatment Maintenance: Y All Preserves Refer to Table 4.5-2 in the PSA/Addendum for the sensitive natural communities that may occur in each preserve.</p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).</p> <ul style="list-style-type: none"> <li>▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>).</li> <li>▶ 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.</li> </ul> <p>The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report.</p> <p>A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist that the sensitive natural community or oak woodland would benefit from treatment in the occupied habitat area even though some loss may occur during treatment activities. For a treatment to be considered beneficial to a sensitive natural community or oak woodland, the qualified RPF or botanist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the community (or similar community) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.</p>				
<p><b>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</b></p> <p>If significant impacts on sensitive natural communities or oak woodlands cannot feasibly be avoided or reduced as specified under Mitigation Measure BIO-3a, the project proponent will implement the following actions:</p> <ul style="list-style-type: none"> <li>▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: <ul style="list-style-type: none"> <li>▪ restoring sensitive natural community or oak woodland functions and acreage within the treatment area;</li> <li>▪ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or</li> <li>▪ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function.</li> </ul> </li> <li>▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to, during, or after treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p>2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.</p> <p>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.</p>				
<p><b>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</b></p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> <li>▶ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented.</li> <li>▶ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).</li> <li>▶ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during treatment</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>treatment activities, environmental conditions and terrain, and the treatment activity being implemented.</p> <ul style="list-style-type: none"> <li>▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.</li> <li>▶ Within this buffer, herbicide application is prohibited.</li> <li>▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging.</li> <li>▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:                             <ul style="list-style-type: none"> <li>▪ No special-status species are present in the wetland habitat</li> <li>▪ The wetland habitat function would be maintained.</li> <li>▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present</li> <li>▪ Fire containment lines and pile burning are prohibited within the buffer</li> </ul> </li> </ul> <p>No fire ignition (and associated use of accelerants) will occur within the wetland buffer</p>				
<b>Greenhouse Gas Emissions</b>				
<p><b>Mitigation Measure GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns</b></p> <p>When planning for and conducting a prescribed burn, project proponents implementing a prescribed burn will incorporate feasible methods for reducing GHG emissions, including the following, which are identified in the <i>National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire</i> (NWCG 2018):</p> <ul style="list-style-type: none"> <li>▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;</li> <li>▶ reduce the total area burned through mosaic burning;</li> <li>▶ burn when fuels have a higher fuel moisture content;</li> <li>▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and</li> <li>▶ schedule burns before new fuels appear.</li> </ul>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>Prior to and during prescribed burn activities</p>	<p>Sonoma Land Trust</p>	<p>Sonoma Land Trust</p>



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.</p> <p>The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.</p>				
<b>Hazardous Materials, Public Health and Safety</b>				
<p><b>Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites</b></p> <p>Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments) or prescribed burning, CAL FIRE and other project proponents will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., California Department of Parks and Recreation) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, the project proponent will conduct a DTSC EnviroStor web search (<a href="https://www.envirostor.dtsc.ca.gov/public/">https://www.envirostor.dtsc.ca.gov/public/</a>) and consult DTSC’s Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.</p>	<p><b>Initial Treatment: Y</b>  <b>Treatment Maintenance: Y</b>  <b>All Preserves</b></p>	<p>During PSA preparation</p> <p><b>Database searches are complete; see results in the PSA/Addendum</b></p>	<p>PSA/Addendum Preparers</p>	<p>Sonoma Land Trust</p>

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